

MISSISSIPPI

BEHAVIORAL RISK FACTORS SURVEY



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ANNUAL REPORT

MISSISSIPPI STATE DEPARTMENT OF HEALTH

2001
Behavioral Risk Factor Surveillance System Report
(BRFSS)

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Introduction

It is generally acknowledged by health care professionals that certain behavior patterns are associated with disease, injury and death. Among these are cigarette smoking, physical inactivity, alcohol consumption and risky sexual behavior. The Behavioral Risk Factor Surveillance System (BRFSS) is a surveillance system designed to estimate the prevalence of these and other health risk factors in all states in the United States. The results provide a tool for evaluating health trends, assessing the risk of chronic disease, and measuring the effectiveness of policies, programs and awareness campaigns.

The BRFSS is a cooperative agreement between the Centers for Disease Control and Prevention (CDC) and the Mississippi State Department of Health. The first survey was done in 1984 when the data was collected at one given point in time. The survey was repeated in 1988 using the same methodology. Beginning in 1990 there has been an annual survey with the data being collected monthly.

The BRFSS survey contains a set of core questions provided by the CDC to gather comprehensive standard information nationwide. The questions are related to health status, access to health care, health awareness, lifestyle, and preventive health. Individual states are allowed to include questions addressing specific issues that are of particular interest to that state.

Methodology

A. SAMPLING DESIGN

The Mississippi BRFSS is a random sample telephone survey. Utilizing the disproportionate stratified sample (DSS) design with random digit dialing and the Computer Assisted Telephone Interviewing (CATI) system, the survey has the potential to represent 93 percent of all households in Mississippi that have telephones according to BellSouth data. A sample size of 3,043 interviews over a 12-month period was selected to obtain a 95 percent confidence interval of $\pm 2.5\%$ on risk factor prevalence estimates in the adult population. Prevalence estimates by individual demographic variables, comprising smaller sample sizes, does not achieve the same level of accuracy as the total sample.

Interviewers, contracted by the MSDH, contact the residences during weekdays between 9:00 a.m. and 9:00 p.m. and Saturdays between 8:30 a.m. and 4:30 p.m. After a residence has been contacted, one adult (18 years of age or older) is randomly selected to be interviewed from all adults residing in the household. Interviews are collected during a two-week period each month.

B. QUESTIONNAIRE

The questionnaire, designed through cooperative agreements with the CDC, is divided into three sections. The first section contains questions on health risk behavior; the second section contains demographic information; and the third contains optional modules.

C. DATA ANALYSIS

The data collected by the MSDH Office of Public Health Statistics was compiled and weighted by the CDC. Weighted counts were based on the 2000 Mississippi population to accurately reflect the population demographics. The weighting factor considered the number of adults and telephone lines in the household, and age/race/sex distribution of the general population. Therefore, the estimated prevalence of any risk factor from the survey represents the total population of Mississippi residents very well. The reader should be aware that the numbers presented in the tables of this report reflect the actual, non-weighted observations for each cell while the percentages in each cell represent the weighted prevalence.

This report presents the percentage of high-risk behavior within each demographic group for each of the sixteen risk factors plus one chronic disease (diabetes). The demographic information for persons reporting a high-risk behavior or chronic disease is also presented. The demographic information collected and presented in this survey covers sex, age, race, education, household income, and employment status.

D. Limitations of the Data

All data collection systems are subject to error, and records may be incomplete or contain inaccurate information. All information in this survey is self-reported; people may not remember essential information, a question may not mean the same thing to different respondents, and some individuals may not respond at all. It is not always possible to measure the magnitude of these errors or their impact on the data. The user must make his or her own evaluation of the data.

E. Sample Size

Sample sizes vary by question and response category due to non-response and skip patterns within the survey instrument. Overall estimates generally have relatively small sampling errors, but estimates for certain population subgroups may be based on small numbers and have relatively large sampling errors. Interpreting estimates that are based on small numbers of respondents can mislead the reader into believing that a given finding is more precise than it actually is. When the number of events is small and the probability of such an event is small, considerable caution must be observed in interpreting the estimates and/or differences between groups and areas. The BRFSS recommends not interpreting percentages where the denominator is based upon fewer than 50 non-weighted respondents.

Definition of Terms and Risk Factors

Arthritis

At Risk for Arthritis - Respondents who report they have chronic joint symptoms or who have been told they have arthritis by a doctor, nurse or other health professional.

Asthma

Asthma Awareness - Respondents who report being told they have asthma by a doctor, nurse or other health professional.

Cervical Cancer

Pap Smear - Female respondents who have not had hysterectomies and who report that they have ever had a pap smear.

Pap Smear Within 3 Years - Female respondents who have not had hysterectomies and who report that they have had a pap smear within the last three years.

Cholesterol

Cholesterol Checked - Respondents who report that they have ever had their blood cholesterol checked.

Cholesterol Checked in Past Five Years - Respondents who report having had their blood cholesterol checked within the past five years.

Cholesterol High - Respondents who have had their blood cholesterol checked and who have ever been told that their blood cholesterol is high by a doctor, nurse, or other health professional.

Colorectal Cancer Screening

Colorectal Cancer - Respondents who report ever having had a sigmoidoscopy or colonoscopy test.

Diabetes

Diabetes Awareness - Respondents who report they have ever been told by a doctor that they have diabetes.

Disability

Limited Activity - Respondents who report that their activity is limited in any way because of physical, mental or emotional problems.

Special Equipment Requirements - Respondents who report having health problems that require the use of special equipment such as a cane, wheelchair, special bed or special telephone.

Exercise

Exercise: Last 30 Days - Respondents who report that, excluding their regular job, in the past 30 days they participated in any physical activity or exercise such as running, walking, calisthenics, golf, or gardening.

Health Insurance

Health Insurance - Respondents who report they have no health care plan.

Health Status

Self-Reported Health Status - Respondents who report that their general health status is fair or poor.

Hypertension

Hypertension Awareness - Respondents who have ever been told they have high blood pressure by a doctor, nurse or other health professional.

Immunization

Flu Shots - Respondents who report that they have received a flu shot within the last twelve months.

Mammography and Clinical Breast Exam (CBE)

Mammogram and CBE - Female respondents, age 40 and older, who report that they have ever had a mammogram and a CBE.

Mammogram and CBE within two years - Female respondents, age 50 and older, who report that they have had a mammogram and a CBE within the last two years.

Physical Activity

No Leisure Time Physical Activity - Respondents who report no leisure-time physical activity during the past month. This measures Healthy People 2010 Objective 22.1 - Target #20%.

Regular and Sustained Physical Activity - Respondents who engage in moderate physical activity for at least 30 minutes per day regardless of intensity. This measures Healthy People 2010 Objective 22.2 - Target \$30%.

Regular and Vigorous Physical Activity - Respondents who engage in vigorous physical activity that promotes the development and maintenance of cardiorespiratory fitness three or more days per week for 20 or more minutes per occasion. This measures Healthy People 2010 Objective 22.3 - Target \$30%.

Prostate Cancer

Prostate Cancer Screening - Male respondents, age 40 and older, who report that they have ever had a Prostate-Specific Antigen (PSA) test used to check for prostate cancer.

Smoking Status

Cigarette Smoker - Respondents who have ever smoked 100 cigarettes in their lifetime and report currently smoking every day or some days. This relates to Healthy People 2010 Objective 27.1a - Target #12%.

Weight Based on Body Mass Index (BMI)

Underweight: Respondents whose body mass index (BMI) is < 18.5 . BMI is defined as weight in kilograms divided by height in meters squared (w/h^2).

Healthy Weight: - Respondents whose body mass index (BMI) is $18.5 \leq \text{BMI} \leq 24.9$. This measures Healthy People 2010 Objective 19.1 - Target \$60%.

Overweight - Respondents whose body mass index (BMI) is $25.0 \leq \text{BMI} \leq 29.9$.

Obese - Respondents whose body mass index (BMI) ≥ 30.0 . This measures Health People 2010 Objective 19.2 - Target #15%.

Survey Results

Health Care Coverage

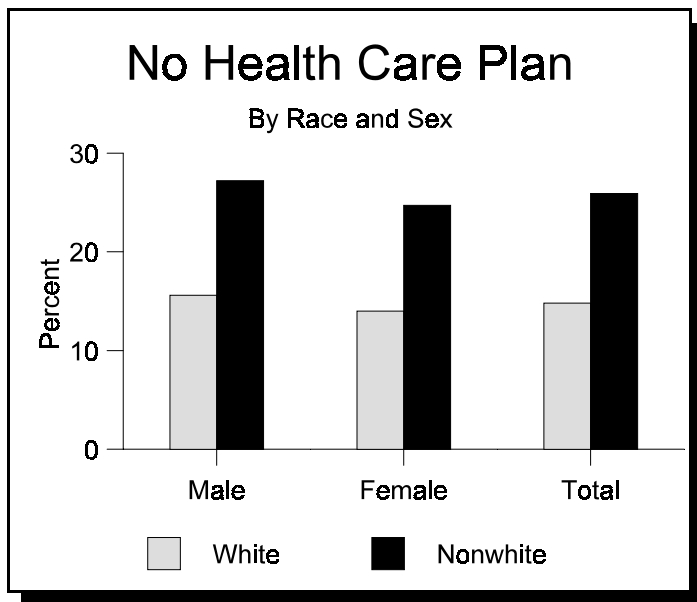


Figure 1

The questions in this section are designed to estimate the number of people who cannot obtain the health care they need because they are not covered by a health care plan or cannot afford to pay for insurance coverage. People at risk are those who have no health insurance, prepaid plans, Medicare, or other government assisted programs such as the military, the VA or Medicaid.

In 2001, 18.6 percent of the respondents indicated they had no health care plan compared to 19.2 percent in 2000. According to the survey, nonwhite males have the highest rate of non-coverage at a rate of 27.2 percent; nonwhite females

were next at 24.7 percent (Figure 1).

Nonwhites from the age of eighteen to twenty-four reported the highest prevalence of no health care coverage at 37.3 percent (Figure 2).

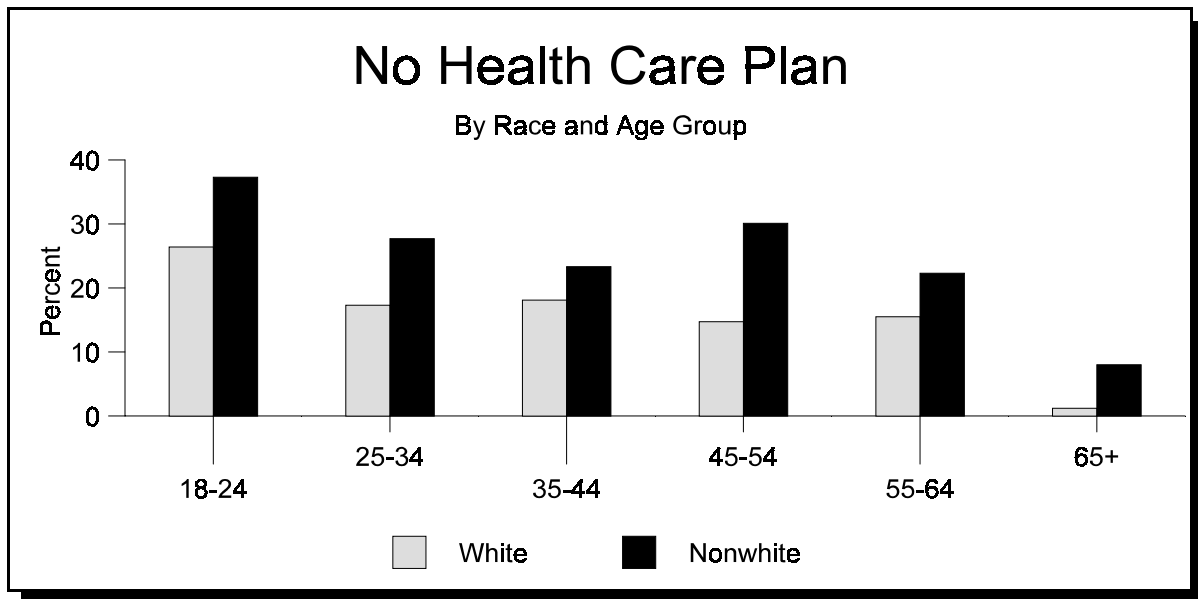


Figure 2

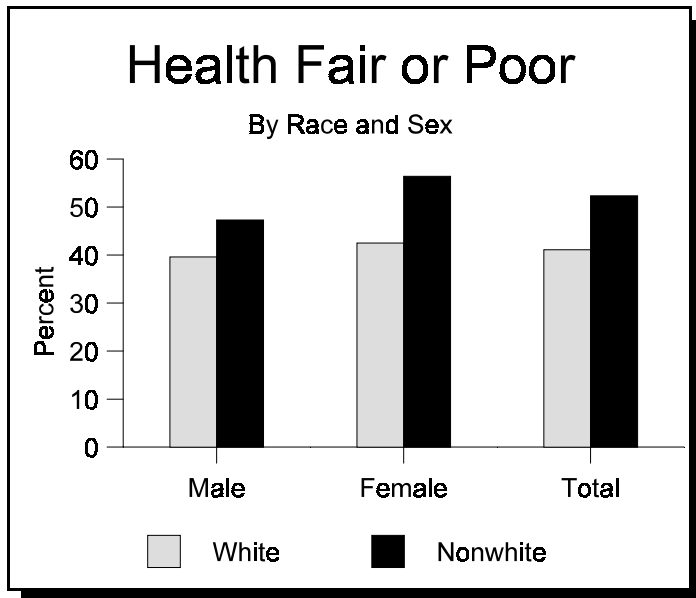
Persons Who Have No Kind of Health Care Plan

Groups	White		Nonwhite		Total	
	Number	Percent	Number	Percent	Number	Percent
Sex						
Male	120	15.6	81	27.2	203	19.4
Female	169	14.0	159	24.7	333	17.9
Age Group						
18-24	40	26.4	40	37.3	80	30.9
25-34	66	17.3	61	27.7	129	21.8
35-44	71	18.1	48	23.3	122	20.2
45-54	56	14.7	54	30.1	110	19.6
55-64	46	15.5	28	22.3	75	17.2
65+	6	1.2	8	8.0	14	2.9
Education						
< High School Graduate	78	31.3	66	28.0	148	30.1
High School Graduate or GED	103	15.8	105	33.2	209	22.4
Some College or Technical School	68	12.2	58	23.7	127	15.8
College Graduate	38	6.8	11	7.2	50	7.0
Income						
< \$15,000	50	22.8	95	36.7	149	31.1
\$15 - \$24,999	74	21.9	62	25.4	136	23.4
\$25 - \$34,999	53	17.4	22	20.0	76	18.3
\$35 - \$49,999	23	6.0	10	15.7	33	8.4
\$50 - \$74,999	14	6.0	1*	2.5	15	5.5
\$75,000+	10	4.9	3*	6.3	13	5.0
Employment Status						
Employed	163	13.9	151	25.4	318	18.0
Not Employed	37	42.7	48	50.6	87	47.2
Student/Homemaker	52	20.8	15	28.4	68	22.5
Retired/Unable to Work	36	7.5	26	13.6	62	9.4
Total	289	14.8	240	25.9	536	18.6

* Sample size less than 50

Health Status

Questions related to health status attempt to determine how people look at their personal health and how well they function physically, psychologically and socially while engaged in normal, daily activities. The questions are important in that they can indicate dysfunction and disability not measured in standard morbidity and mortality data.



Females of both races reported their health as being worse than males (Figure 3). Nonwhite respondents report their health as being worse than whites. Nonwhite respondents reported fair or poor health at a rate of 52.3% compared to 41.1% for whites.

Reported fair or poor health tended to increase with age. Persons in the 18 to 24 age group reported a rate of 36.5% while those more than 65 years of age reported a rate of 51.7%.

Figure 3

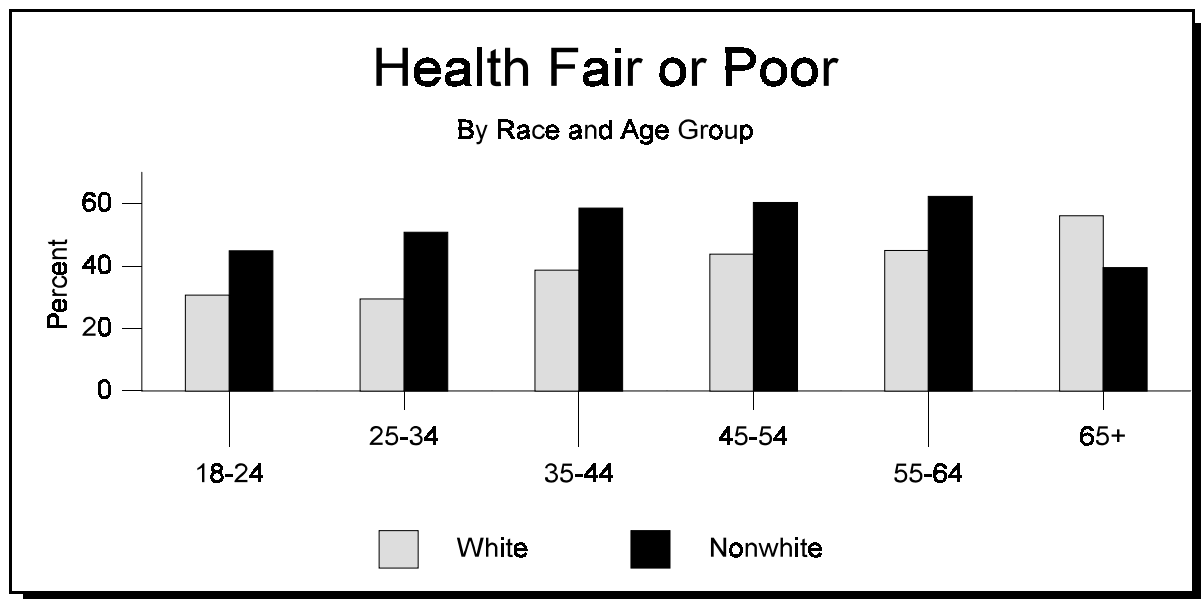


Figure 4

Health Fair or Poor

Groups	White		Nonwhite		Total	
	Number	Percent	Number	Percent	Number	Percent
Sex						
Male	150	18	80	23.6	230	19.7
Female	297	23.4	202	29.8	503	25.6
Age Group						
18-24	14	8.6	10	11.3	24	9.7
25-34	25	7.4	34	13.3	60	9.9
35-44	55	14	41	22.3	97	16.9
45-54	84	21.1	67	33.5	151	25
55-64	80	28.8	59	49.6	141	34.1
65+	184	40.6	71	58	255	44.8
Education						
<High School	138	44.6	110	43.1	250	43.6
High School or GED	158	23.6	92	26.1	252	24.5
Some College or Technical School	92	14.6	48	16.5	140	15.1
College Graduate	55	10.3	27	16.9	82	11.7
Income						
<\$15,000	123	48.9	121	41.3	246	44.5
\$15-\$24,999	104	32.4	62	26.4	168	29.8
25-\$34,999	58	18.1	22	15	80	16.9
\$35-\$49,999	34	10.2	8	10.8	42	10.3
\$50-\$74,999	14	6.5	8*	19.7	22	8.7
\$75,000+	17	6.6	6*	16.4	23	7.7
Employment Status						
Employed	123	10.7	92	15.6	217	12.4
Not employed	27	24.8	31	27.6	58	26
Student/Homemaker	42	15.9	7	11.3	50	15
Retired/Disabled	252	46.9	150	66	403	52.8
Total	447	20.8	282	27	733	22.8

* Sample size less than 50

Tobacco Use

Tobacco use is the single leading preventable cause of death in Mississippi and the United States. Each year, about one-fifth of Mississippians die of tobacco-related causes. Health problems related to tobacco use include cancers, lung disease, and heart disease. Over the past

decade the percentage of current adult smokers has not changed significantly. During the same period smokeless tobacco and cigar use among adults has increased. Mississippi was the first state to reach a settlement with the tobacco industry. The Mississippi State Department of Health has drafted a state tobacco plan which includes strategies to prevent initiation of tobacco use among youth, promote cessation among youth and adults, and eliminate exposure to environmental tobacco smoke.

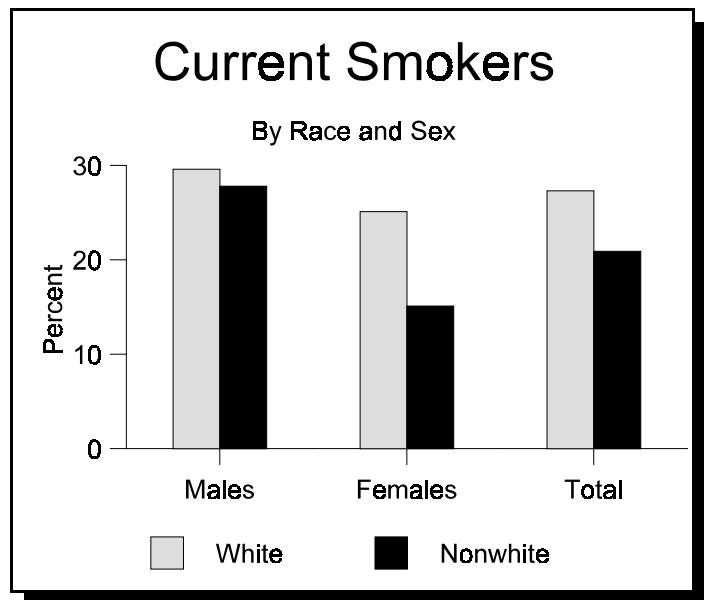


Figure 5

The group with the largest percentage of current smokers is white males at 29.6 percent followed by nonwhite males at 27.8 percent and white females at 25.1 percent. The

group with the lowest percentage of current smokers is nonwhite females at 15.1 percent (Figure 5). Overall, the rate of current smoking in Mississippi is 25.1 percent. The Healthy People 2000 objective is 15 percent.

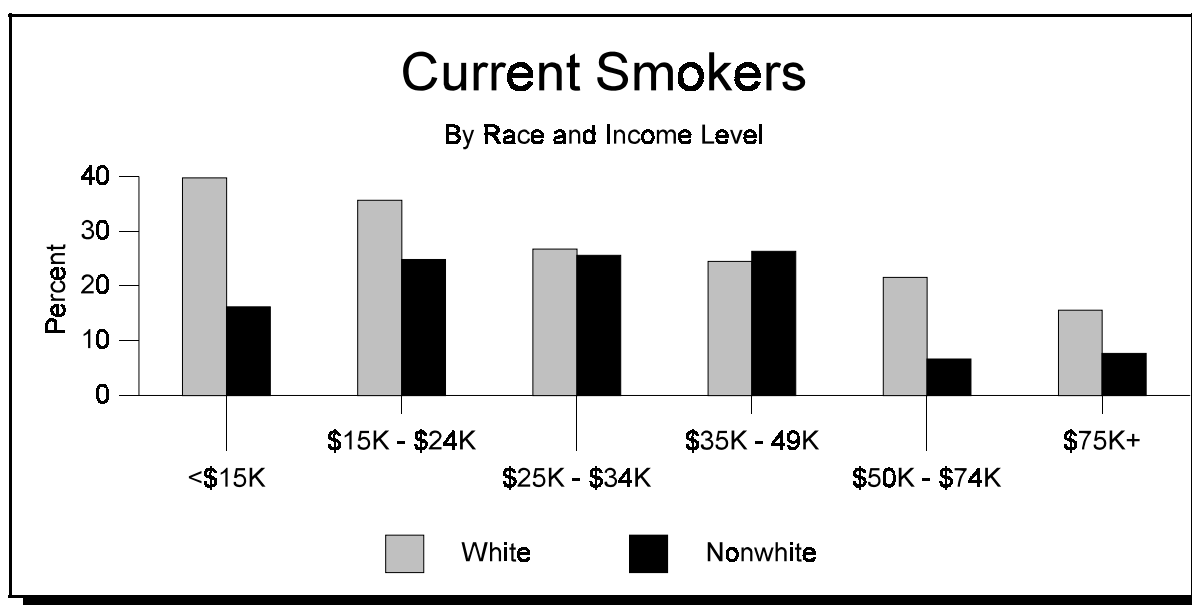


Figure 6

Persons Who Have Smoked at Least 100 Cigarettes and Who Now Smoke

Groups	White		Nonwhite		Total	
	Number	Percent	Number	Percent	Number	Percent
Sex						
Male	236	29.6	89	27.8	328	29.1
Female	302	25.1	107	15.1	412	21.6
Age Group						
18-24	61	41.1	22	22.3	84	33.3
25-34	116	31.1	40	22.6	158	27.7
35-44	131	31.8	43	19.9	177	27.7
45-54	116	30.9	58	28.5	174	30.2
55-64	60	21.6	22	18.7	82	20.6
65+	52	12.3	11	9.6	63	11.6
Education						
< High School	116	42.2	48	17.3	168	30.9
High School Graduate or GED	190	31.7	82	27.9	273	30.3
Some College or Technical School	152	27.1	42	16.2	194	23.6
College Graduate	79	14.1	23	16.0	103	14.7
Income						
< \$15,000	81	39.8	47	16.2	130	26.7
\$15 - \$24,999	111	35.7	55	24.9	167	31.0
\$25 - \$34,999	90	26.8	34	25.6	125	26.4
\$35 - \$49,999	80	24.5	20	26.4	100	24.8
\$50 - \$74,999	51	21.6	4*	6.7	55	19.2
\$75,000+	39	15.6	3*	7.7	43	15.0
Employment Status						
Employed	326	27.9	122	21.8	452	25.8
Not Employed	45	47.6	26	28.1	73	38.0
Student/Homemaker	56	27.0	9	12.0	65	23.7
Retired/Unable to Work	109	20.9	37	16.6	146	19.6
Total	538	27.3	196	20.9	740	25.1

* Sample size less than 50

Diabetes

Diabetes was the seventh leading cause of death in Mississippi for the year 2001 with a death rate of 23.0 per 1000 population. According to the 2001 BRFSS survey, 9.3 percent of all respondents reported being told by a doctor that they have diabetes. This represents an increase

of 22.4 percent over the rate of 7.3 percent reported in 2000 and 17.7 percent over the rate of 7.9 percent reported in 1999.

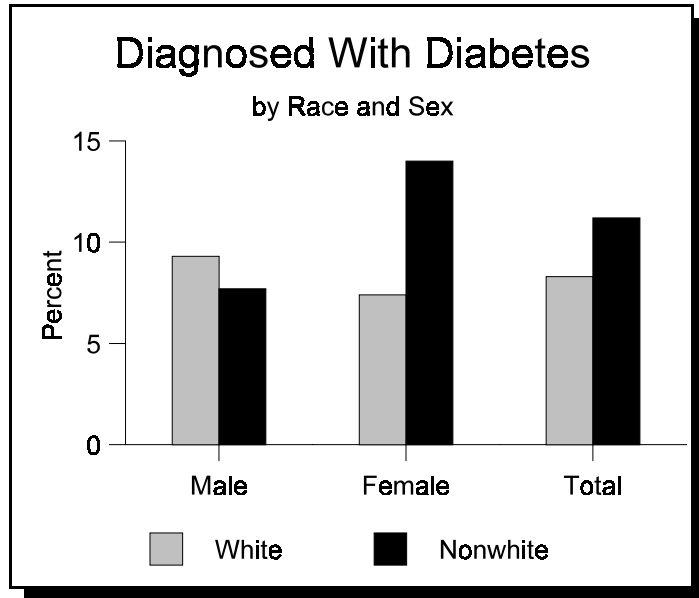


Figure 7

Nonwhite females continue to comprise the largest group having a rate of 14.0 percent followed by white males with a rate of 9.4 percent. Nonwhite males responded with a rate of 7.7 percent and white females were the lowest at 7.4 percent (Figure 7).

The rate of diabetes showed a marked difference in categories of education. Respondents who did not complete high school reported rates of 16.5 percent which is more than twice that in other education categories.

Those with a high school education reported a rate of 7.3 percent; those with some college work, a rate of 7.7 percent; and college graduates a rate of 7.9 percent.

Clear differences appear by age of the respondent in the rate of diabetes. Only 4.5 percent of respondents under age 45 reported having diabetes while 15.3 percent of those above 45 reported they had diabetes. Respondents 65 years and older reported a rate of 19.0 percent (Figure 8).

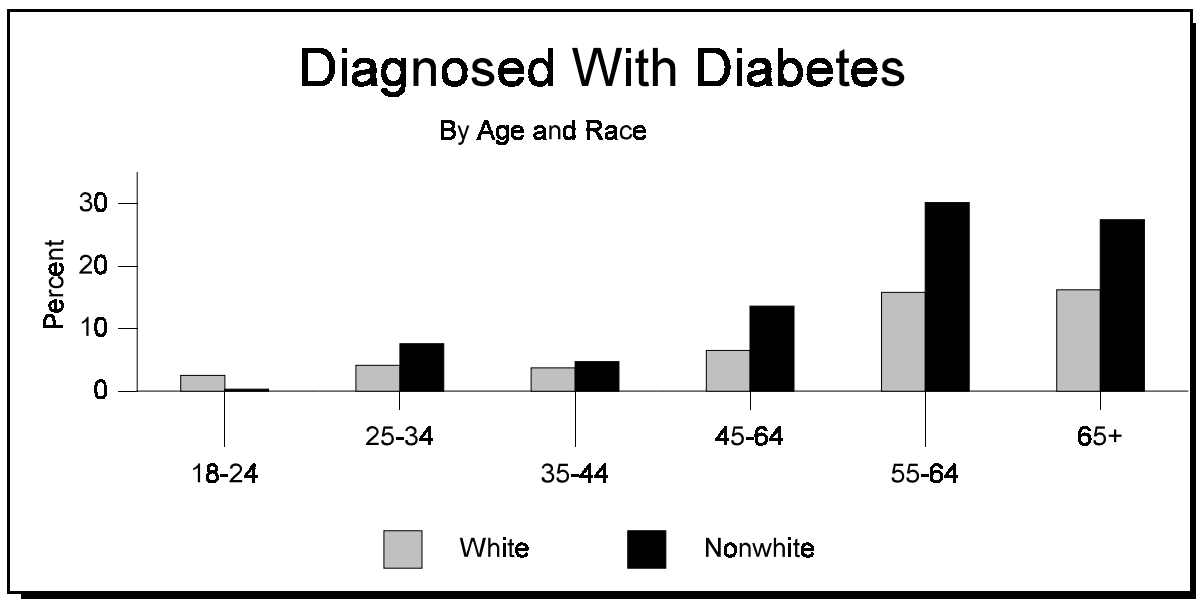


Figure 8

Ever Told by Doctor You Have Diabetes

Groups	White		Nonwhite		Total	
	Number	Percent	Number	Percent	Number	Percent
Sex						
Male	73	9.4	32	7.7	106	8.8
Female	94	7.4	97	14.0	192	9.7
Age Group						
18-24	3	2.5	1	0.3	4	1.5
25-34	11	4.1	14	7.6	25	5.5
35-44	16	3.7	11	4.7	28	4.2
45-54	22	6.5	27	13.6	49	8.7
55-64	37	15.8	37	30.2	75	19.5
65+	75	16.2	39	27.4	114	19.0
Education						
< High School	38	13.9	57	19.9	95	16.5
High School Graduate or GED	53	7.4	23	6.6	78	7.3
Some College or Technical School	43	7.6	25	8.2	68	7.7
College Graduate	32	6.8	21	11.7	53	7.9
Income						
< \$15,000	36	14.8	51	16.7	88	15.9
\$15 - \$24,999	36	10.1	26	9.1	62	9.6
\$25 - \$34,999	17	5.1	13	7.8	30	6.0
\$35 - \$49,999	24	8.7	4	3.7	28	7.3
\$50 - \$74,999	13	6.3	7*	11.6	20	7.2
\$75,000+	12	6.3	8*	24.5	21	8.8
Employment Status						
Employed	57	5.7	41	6.6	99	6.0
Not Employed	8	5.3	6	2.7	14	3.9
Student/Homemaker	16	6.9	3	3.6	20	6.3
Retired/Unable to Work	86	16.3	79	32.3	165	21.2
Total	167	8.3	129	11.2	298	9.3

* Sample size less than 50

Hypertension Awareness

Early detection of high blood pressure allows treatment that can prevent many of the complications of the disease. Untreated high blood pressure increases the risk of stroke, heart attack and kidney failure. High blood pressure can be controlled by losing weight, taking medication, exercising, not smoking, managing stress and lowering sodium and alcohol intake.

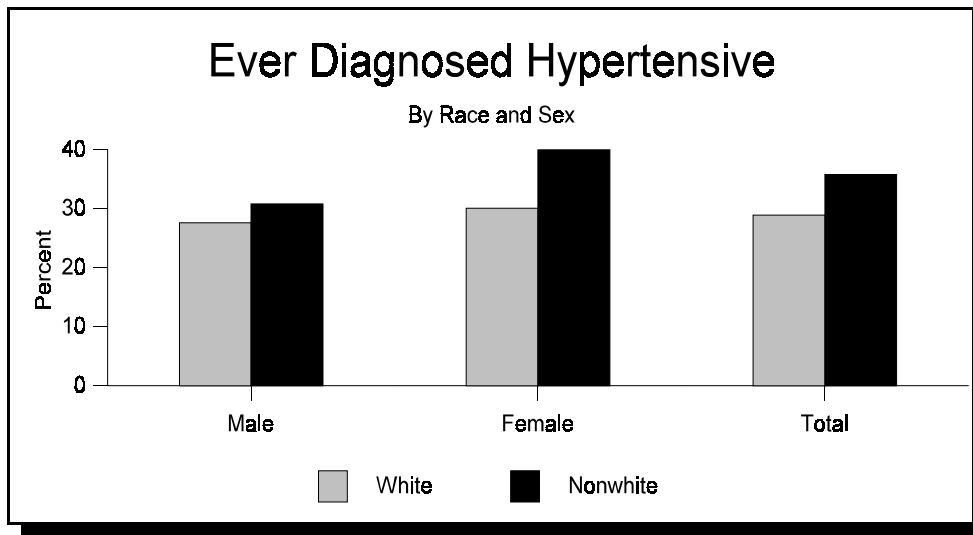


Figure 9

Two aspects of hypertension in Mississippi are available in this report; a) respondents who have ever been told they have high blood pressure by a health care professional and b) respondents who are taking medication to control high blood pressure.

The 2001 BRFSS survey indicates that approximately 31.3 percent of the people surveyed in Mississippi have been told they have high blood pressure by a health care professional.

Nonwhites were more likely to be hypertensive than whites. The overall rate of hypertension among nonwhites in Mississippi was 35.8 percent compared to 28.9 for whites. Forty percent of the nonwhite females in the survey said they had been told they were hypertensive compared to 30.1 percent of the white females (Figure 9). Approximately 30.8 percent of the nonwhite male respondents had been told they were hypertensive. The white male rate was 27.6 percent.

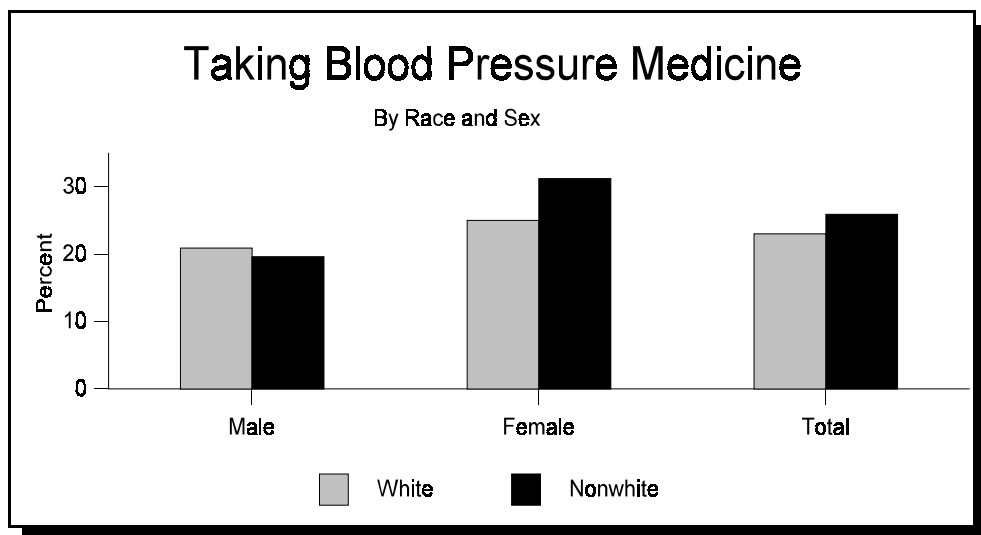


Figure 10

Twenty-four percent of the respondents said

they were taking medication for high blood pressure. Nonwhite females reported the highest rate for taking medication with a rate of 31.2 percent followed by white females at 25.0 percent. White males reported 20.9 percent and nonwhite males were the lowest at 19.6 percent (Figure 10).

Ever Told That You Have High Blood Pressure

Groups	White		Nonwhite		Total	
	Number	Percent	Number	Percent	Number	Percent
Sex						
Male	237	27.6	114	30.8	354	28.7
Female	393	30.1	280	40.0	676	33.5
Age Group						
18-24	7	5.2	9	4.8	16	5.0
25-34	38	10.7	44	21.0	83	15.1
35-44	69	16.8	69	32.6	140	22.5
45-54	128	34.5	95	49.1	223	39.1
55-64	134	47.6	77	60.4	214	51.2
65+	251	53.8	98	78.2	349	59.8
Education						
< High School	123	37.2	135	49.9	259	42.8
High School Graduate or GED	219	31.0	119	31.9	340	31.3
Some College or Technical School	145	25.1	83	30.4	230	26.9
College Graduate	141	25.6	53	29.6	194	26.4
Income						
< \$15,000	108	41.0	132	46.4	242	44.0
\$15 - \$24,999	123	34.0	93	37.4	216	35.3
\$25 - \$34,999	82	23.6	51	31.9	134	26.6
\$35 - \$49,999	82	25.3	21	22.4	105	24.8
\$50 - \$74,999	53	21.9	16*	26.8	69	22.7
\$75,000+	66	28.4	9*	25.8	75	27.8
Employment Status						
Employed	280	23.4	185	29.1	470	25.5
Not Employed	25	27.1	26	17.2	51	21.7
Student/Homemaker	49	16.6	11	18.2	61	17.1
Retired/Unable to Work	275	49.5	171	72.2	446	56.4
Total	630	28.9	394	35.8	1,030	31.3

* Sample size less than 50

Taking Blood Pressure Medicine

Groups	White		Nonwhite		Total	
	Number	Percent	Number	Percent	Number	Percent
Sex						
Male	180	20.9	77	19.6	259	20.5
Female	322	25.0	221	31.2	545	27.2
Age Group						
18-24	2	1.9	2	0.8	4	1.5
25-34	16	5.4	20	9.3	37	7.2
35-44	40	9.7	41	19.6	83	13.4
45-54	90	23.9	73	35.1	163	27.5
55-64	121	44.2	69	52.7	191	46.3
65+	232	49.7	91	71.3	323	55.0
Education						
< High School	97	28.7	111	41.0	209	34.2
High School Graduate or GED	180	25.5	82	21.0	263	23.7
Some College or Technical School	109	18.5	61	21.7	171	19.5
College Graduate	114	21.5	41	19.0	155	20.9
Income						
< \$15,000	85	30.6	106	36.6	192	33.9
\$15 - \$24,999	101	27.5	69	28.8	170	27.9
\$25 - \$34,999	65	19.7	35	20.0	101	20.0
\$35 - \$49,999	59	18.2	14	12.7	74	16.9
\$50 - \$74,999	39	17.0	11*	16.3	50	16.9
\$75,000+	54	23.7	8*	18.8	62	22.9
Employment Status						
Employed	195	16.8	117	17.5	316	17.1
Not Employed	18	18.0	20	13.4	38	15.4
Student/Homemaker	41	14.4	8	12.8	49	14.0
Retired/Unable to Work	248	44.4	152	62.4	400	49.9
Total	502	23.0	298	25.9	804	24.0

* Sample size less than 50

Cholesterol Awareness

Persons having elevated blood cholesterol levels experience twice the risk of developing coronary heart disease. Studies reveal that small reductions in cholesterol levels are effective in reducing risks.

For those with high cholesterol readings, changes in diets along with increasing physical activity will reduce the level approximately 75 percent of the time. The National Cholesterol Education Program recommends that healthy adults more than twenty years old have their blood cholesterol levels checked at least once every five years.

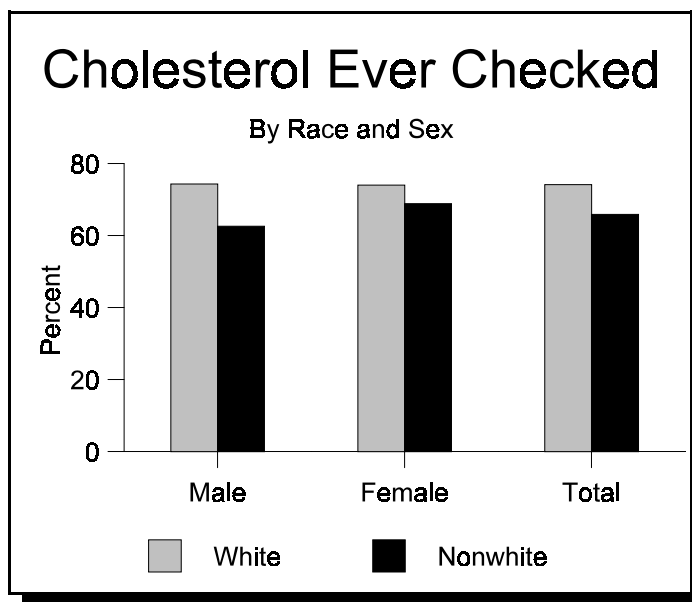


Figure 11

Sixty-eight percent of the Mississippians in the survey said their cholesterol had been checked in the past five years. This is an increase from 62 percent reported in 1999 and 60 percent in 1997. White respondents were more likely to have had their cholesterol checked (74.1 percent) than nonwhites (65.9 percent).

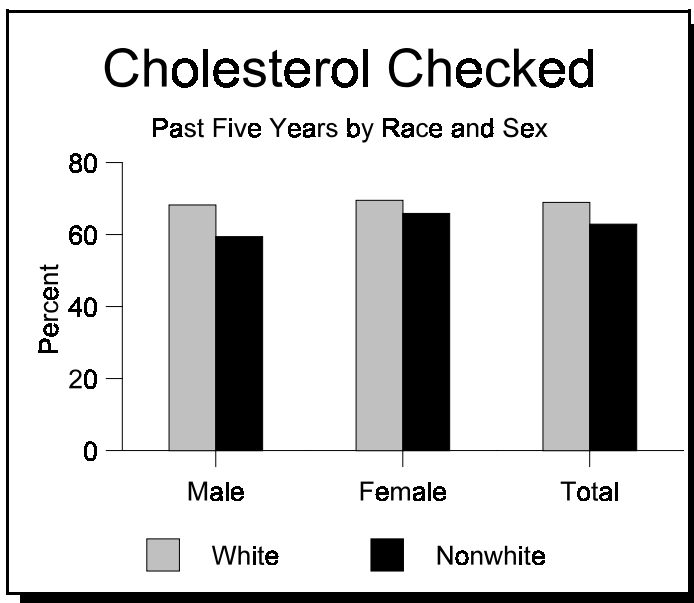


Figure 12

Nonwhite male respondents reported the lowest rate for examinations with a rate of 62.9 percent but this is an increase from 52.7 percent reported in 1999 and from 49.0 percent reported in 1997.

Approximately 22 percent of the respondents said they have ever been told their blood cholesterol is high but in those age 50 and above, the rate almost doubled at 39.4 percent.

Ever Had Blood Cholesterol Checked

Groups	White		Nonwhite		Total	
	Number	Percent	Number	Percent	Number	Percent
Sex						
Male	627	74.3	212	62.6	843	70.4
Female	948	74.0	459	68.8	1,413	71.9
Age Group						
18-24	65	38.7	50	45.9	115	41.6
25-34	223	63.5	129	59.3	355	61.6
35-44	287	70.2	137	68.9	427	69.4
45-54	322	84.5	142	72.2	464	80.6
55-64	255	92.0	102	83.7	360	89.8
65+	407	88.9	108	81.7	516	87.0
Education						
< High School	212	69.2	161	63.8	376	66.2
High School Graduate or GED	487	73.5	210	58.9	700	67.9
Some College or Technical School	410	70.5	170	71.7	583	70.8
College Graduate	462	81.8	124	77.7	586	80.7
Income						
< \$15,000	160	59.4	175	62.6	336	60.8
\$15 - \$24,999	253	73.7	156	63.2	412	69.2
\$25 - \$34,999	255	78.9	93	65.2	350	74.4
\$35 - \$49,999	258	78.0	66	77.3	326	77.7
\$50 - \$74,999	189	72.9	38*	74.1	227	73.1
\$75,000+	206	85.2	27*	86.7	233	84.6
Employment Status						
Employed	892	74.7	383	65.0	1,283	71.1
Not Employed	63	60.1	54	44.7	117	51.5
Student/Homemaker	149	54.5	31	57.8	180	55.2
Retired/Unable to Work	467	85.9	200	82.7	669	84.9
Total	1,575	74.1	671	65.9	2,256	71.2

* Sample size less than 50

Cholesterol Checked in Past 5 Years

Groups	White		Nonwhite		Total	
	Number	Percent	Number	Percent	Number	Percent
Sex						
Male	575	68.2	199	59.4	778	65.3
Female	885	69.5	439	65.9	1,329	68.0
Age Group						
18-24	61	35.7	49	45.2	110	39.6
25-34	208	59.3	118	54.1	328	57.0
35-44	258	63.7	133	67.6	394	64.8
45-54	296	78.0	136	69.0	432	75.2
55-64	243	88.4	96	78.7	342	85.9
65+	381	82.8	103	78.3	485	81.6
Education						
< High School	192	61.8	153	61.5	348	61.3
High School Graduate or GED	454	68.9	202	56.7	659	64.2
Some College or Technical School	384	66.3	159	67.4	545	66.6
College Graduate	428	76.1	120	74.5	548	75.5
Income						
< \$15,000	143	52.3	165	59.5	309	56.0
\$15 - \$24,999	232	67.8	146	59.8	381	64.4
\$25 - \$34,999	238	73.2	89	62.2	328	69.5
\$35 - \$49,999	245	74.6	63	73.8	310	74.3
\$50 - \$74,999	179	69.1	38*	74.1	217	69.9
\$75,000+	193	80.1	26*	79.0	219	79.2
Employment Status						
Employed	827	69.3	363	61.7	1,197	66.4
Not Employed	60	57.5	52	43.4	112	49.6
Student/Homemaker	139	51.0	29	55.5	168	51.9
Retired/Unable to Work	431	79.8	193	80.4	626	80.0
Total	1,460	68.9	638	62.9	2,107	66.7

* Sample size less than 50

Breast Cancer Screening

A mammogram and a breast examination by a medical professional (clinical breast exam or CBE) are recommended yearly by the American Cancer Society and the National Cancer Advisory Board for women over the age of 40. The American Cancer Society states that women between the ages of 20 and 39 should have a clinical breast examination every three years, and all women over age 20 should do breast self examinations (BSE) every month

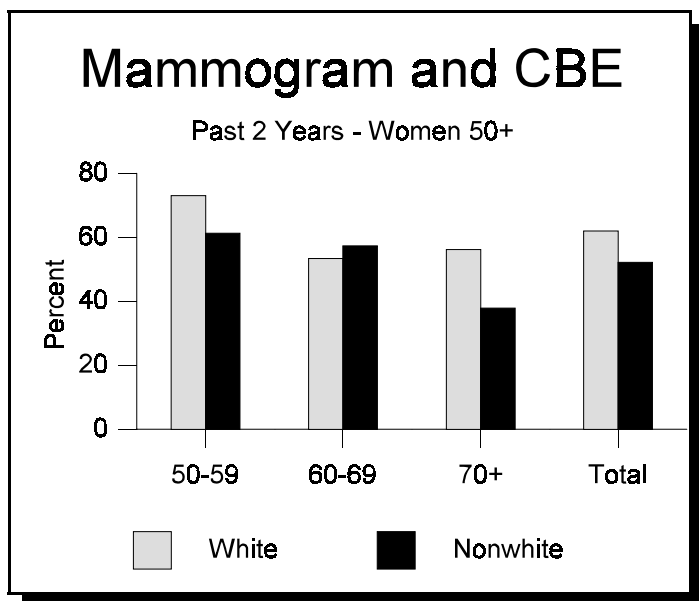


Figure 13

The MSDH breast and cervical cancer program have established a goal to reduce breast cancer deaths to no more than 17.0 per 100,000 female population by 2002. In 1999, there were 29.7 breast cancer deaths per 100,000 females, in 2000 there were 31.4 deaths per 100,000 and in 2001 29.9 deaths per 100,000.

The 2001 BRFSS survey indicated that 74.6 percent of the women in Mississippi age 40 and above had ever had a mammogram and a clinical breast examination (CBE). In women age 50 and older, white respondents had a mammogram and CBE within two years

at a rate of 61.9 percent compared to a rate of 52.2 percent for nonwhites.

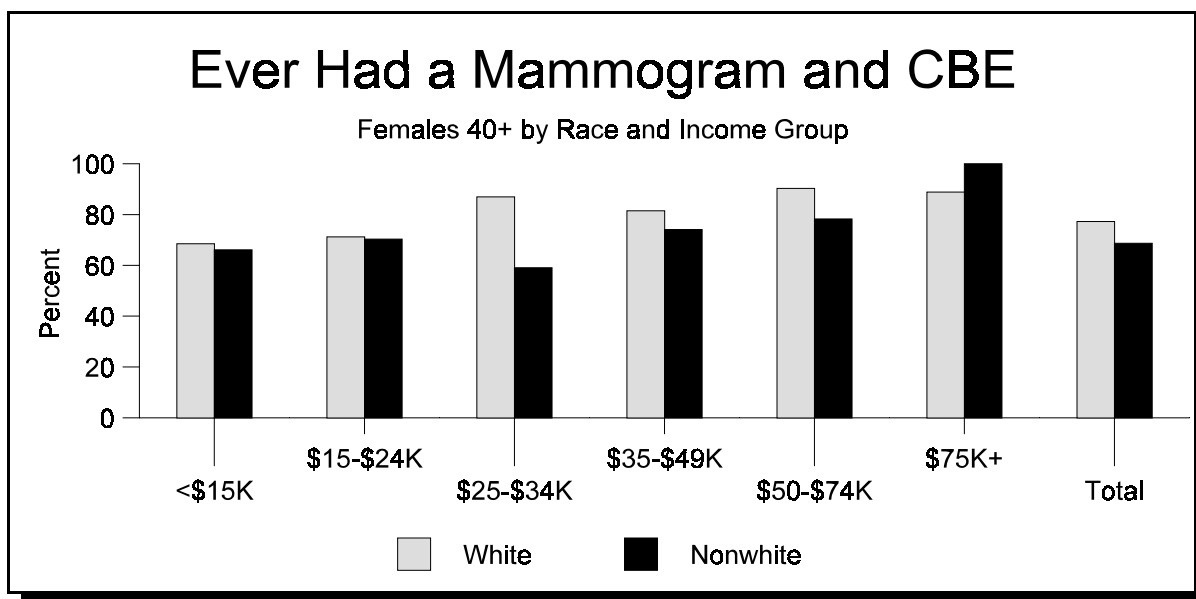


Figure 14

Year 2010 National Health Objective

Increase to at least 70.0 percent the proportion of women aged 50 and older who have received a clinical breast examination and mammogram within the preceding one to two years.

2001 BRFSS data revealed that 59.2 percent of Mississippi women aged 50 and older have received a clinical breast examination and mammogram within the preceding one to two years.

Centers for Disease Control surveys reveal that early detection of breast cancer has increased considerably in recent years, but in 1993 in the United States, only 47 percent of the women aged 50-64 years and 39 percent of women aged 70 years or older reported having a recent mammogram.

The Breast and Cervical Cancer Early Detection Program follows the National Cancer Advisory Board recommendations; however, because of increased incidence and mortality among older women, the program targets women aged 50 to 64.

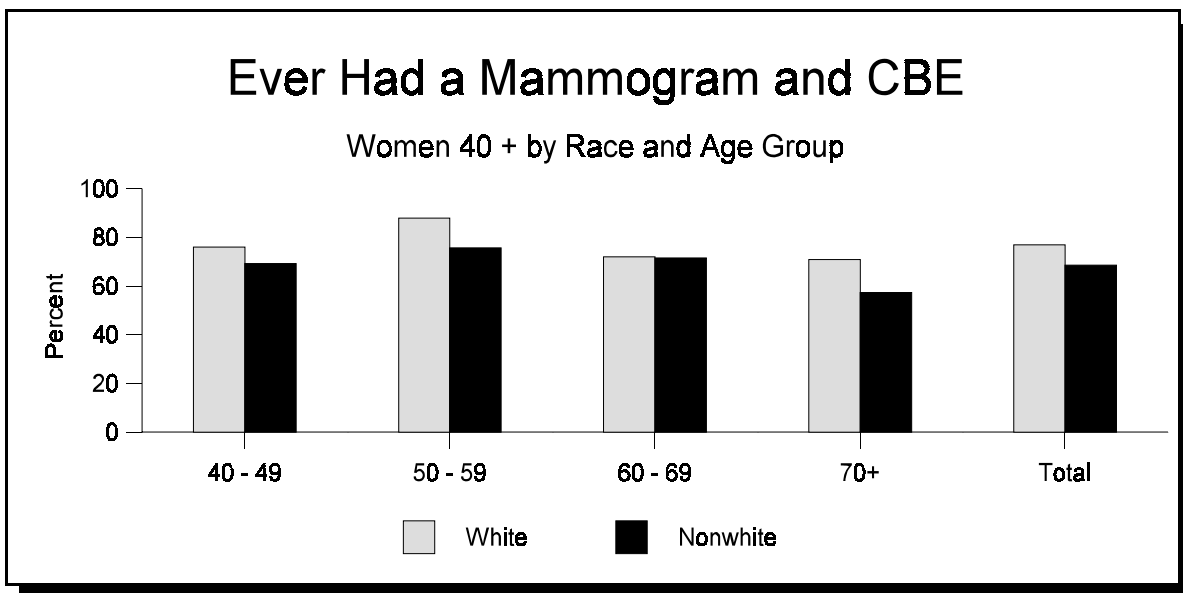


Figure 15

Females 40+ Who Have Ever Had a Mammogram and CBE

Groups	White		Nonwhite		Total	
	Number	Percent	Number	Percent	Number	Percent
Age Group						
40-49	182	76.0	85	69.2	268	73.5
50-59	191	87.9	71	75.7	262	84.6
60-69	106	72.1	42	71.6	149	71.8
70+	159	71.0	42	57.3	201	67.1
Education						
< High School Graduate	92	65.4	76	61.5	168	62.8
High School Graduate or GED	220	76.0	74	71.8	295	75.0
Some College or Technical School	175	81.4	50	75.6	225	80.0
College Graduate	151	85.1	39	74.1	190	82.9
Income						
< \$15,000	93	68.5	84	66.1	178	66.8
\$15 - \$24,999	107	71.2	52	70.3	159	70.9
\$25 - \$34,999	105	87.0	22*	59.1	127	80.1
\$35 - \$49,999	81	81.5	19*	74.1	100	79.9
\$50 - \$74,999	59	90.3	10*	78.3	69	88.6
\$75,000+	72	88.8	5*	100.0	77	89.5
Employment Status						
Employed	299	82.9	114	70.9	414	79.0
Not Employed	18*	56.9	21*	69.6	39	61.5
Student/Homemaker	85	76.3	5*	43.4	91	73.9
Retired/Unable to Work	234	72.8	99	67.1	333	70.8
Total	638	77.3	240	68.7	880	74.6

* Sample size less than 50

Had a Mammogram and a CBE in the Past Two Years (Women 50+)

Groups	White		Nonwhite		Total	
	Number	Percent	Number	Percent	Number	Percent
Age Group						
50-59	157	73.0	57	61.3	214	69.8
60-69	78	53.3	35	57.3	114	54.4
70+	121	56.1	27	37.9	148	51.1
Education						
High School Graduate	54	45.8	46	45.4	100	45.2
High School Graduate or GED	131	59.8	37	66.0	169	61.1
Some College or Technical School	92	68.0	20*	61.6	112	66.7
College Graduate	79	78.3	15*	44.5	94	71.4
Income						
< \$15,000	60	55.3	46	50.9	107	53.2
\$15 - \$24,999	63	50.4	33*	65.4	96	54.8
\$25 - \$34,999	56	72.1	7*	45.0	63	67.1
\$35 - \$49,999	40	68.5	4*	60.9	44	67.5
\$50 - \$74,999	21*	82.7	3*	55.6	24*	78.9*
\$75,000+	43*	89.3	3*	100.0	46	89.9
Employment Status						
Employed	124	68.4	41	56.7	165	64.9
Not Employed	8*	35.5	8*	73.6	16*	45.3
Student/Homemaker	54	68.9	2*	17.4	57	65.2
Retired/Unable to Work	168	57.3	67	49.3	235	54.6
Total	356	61.9	119	52.2	476	59.2

* Sample size less than 50

Cervical Cancer Screening

In 2001, the American Cancer Society estimates that in the United States there will be about 12,800 new cases of invasive cervical cancer and about 4,800 will die of the disease. When detected and treated early, cervical cancer can often be cured. At one time cervical cancer was one of the most common causes of cancer death for American women. Between 1955 and 1992, the number of deaths from cervical cancer declined by 74 percent. The American Cancer Society attributes the decline to the use of the Pap smear as a screening test for cervical cancer. All women should have yearly Pap smears as recommended by the American Cancer Society starting at age 18 or when they become sexually active. The Breast and Cervical Cancer Early Detection Program currently follows the American Cancer Society recommendations.

Year 2010 National Health Objective

1. Increase to at least 97.0 percent the proportion of women aged 18 and older who have ever received a Pap test.

2001 BRFSS data indicate that 96.4 percent of Mississippi women aged 18 and older have received a Pap test. This figure represents an increase from 92.7 percent reported in the 1999 BRFSS Report.

2. Increase to at least 90.0 percent the proportion of women aged 18 and older who have received a Pap test within the preceding one to three years.

The 2001 BRFSS data indicate that 86.3 percent of Mississippi women aged 18 and older have received a Pap test within the preceding one to three years which is an increase from 82.7 percent reported in 1999.

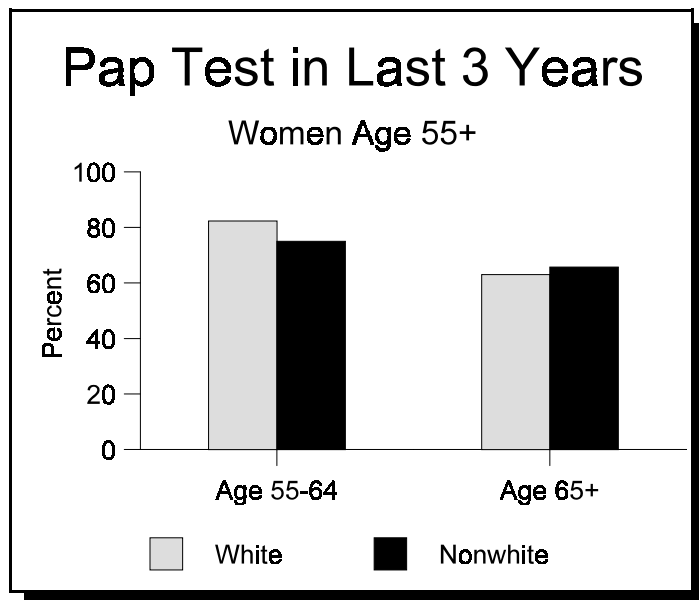


Figure 16

Centers for Disease Control surveys show that in the United States for 1998, 92 percent of women aged 18 years or older reported ever having a Pap smear and 79 percent reported having one within the preceding three years. In Mississippi, in 2001 the rate of recent Pap screening among women ages 65 and older was substantially lower (63.6 percent).

Females 18+ Who Have Had a Pap Test in Past Three Years

Groups	White		Nonwhite		Total	
	Number	Percent	Number	Percent	Number	Percent
Age Group						
18-24	63	87.5	53	87.7	117	87.7
25-34	173	94.7	131	96.1	308	95.4
35-44	160	91.6	87	90.0	249	91.0
45-54	110	85.3	60	82.0	170	84.2
55-64	58	82.3	27*	75.0	86	80.3
65+	63	63.0	28*	65.7	91	63.6
Education						
< High School Graduate	59	64.8	68	74.4	129	70.0
High School Graduate or GED	188	87.4	141	91.1	331	89.0
Some College or Technical School	190	90.0	104	87.7	297	89.3
College Graduate	195	89.9	74	93.3	271	90.8
Income						
< \$15,000	51	63.5	119	84.6	174	78.0
\$15 - \$24,999	81	76.9	108	88.2	190	83.4
\$25 - \$34,999	105	87.9	52	92.2	158	89.2
\$35 - \$49,999	117	97.2	34*	96.6	152	97.2
\$50 - \$74,999	79	87.2	20*	100.0	99	89.7
\$75,000+	77	92.2	9*	100.0	87	93.2
Employment Status						
Employed	384	91.3	247	91.5	638	91.4
Not Employed	28*	78.6	43	79.0	72	79.1
Student/Homemaker	135	84.8	28*	85.5	164	85.0
Retired/Unable to Work	84	71.7	70	76.1	154	73.6
Total	632	86.1	388	86.6	1,029	86.3

* Sample size less than 50

Females 18+ Who Have Ever Had a Pap Test

Groups	White		Nonwhite		Total	
	Number	Percent	Number	Percent	Number	Percent
Age Group						
18-24	63	87.5	54	90.3	118	88.7
25-34	178	98.1	134	99.0	316	98.6
35-44	174	100.0	95	100.0	271	100.0
45-54	129	100.0	72	95.3	201	98.4
55-64	70	100.0	35*	100.0	106	100.0
65+	100	93.5	41*	91.4	141	92.4
Education						
< High School Graduate	87	94.0	90	96.2	179	94.9
High School Graduate or GED	215	98.7	150	96.0	367	97.6
Some College or Technical School	206	95.6	114	95.7	323	95.7
College Graduate	211	97.0	78	99.2	291	97.5
Income						
< \$15,000	72	88.0	138	98.5	214	95.1
\$15 - \$24,999	104	97.6	119	96.7	224	97.1
\$25 - \$34,999	119	97.1	56	98.9	176	97.7
\$35 - \$49,999	121	99.5	35*	100.0	157	99.6
\$50 - \$74,999	84	93.8	20*	100.0	104	95.0
\$75,000+	83	100.0	9*	100.0	93	100.0
Employment Status						
Employed	419	98.8	265	98.0	691	98.4
Not Employed	33*	95.9	52	96.2	86	96.2
Student/Homemaker	149	92.6	29*	87.9	179	91.7
Retired/Unable to Work	116	95.1	87	94.5	203	94.9
Total	719	96.6	433	96.2	1,161	96.4

* Sample size less than 50

Immunization

The sixth leading cause of death in Mississippi during 2001 was influenza and pneumonia producing a death rate of 26.4 per 100,000 population.

The *Healthy People 2010* goal for influenza vaccinations is that 90 percent of the noninstitutionalized people age 65 and older have been vaccinated in the preceding twelve months. The target for persons age 18 to 64 who are noninstitutionalized is 60 percent. Influenza vaccine can prevent the disease and its complications. In the elderly, the vaccine is less effective in disease prevention, but reduces severity of disease and the incidence of complications and death. It is an important intervention to reduce hospitalizations due to complications of influenza. Influenza vaccine is recommended for all persons 65 years of age and older, and for those with chronic health problems which put them at risk for complications.

In the 2001 BRFSS survey, 61.8 percent of the respondents age 65 and older reported they had received the influenza vaccine in the last 12 months. The proportion vaccinated in this age group reflected a marked difference according to race: 68.5 percent of whites reported having been vaccinated compared to only 42.2 percent for nonwhites. Vaccination rates did not differ greatly by sex: 28.6 percent of males and 30.1 percent of females reported receiving vaccine.

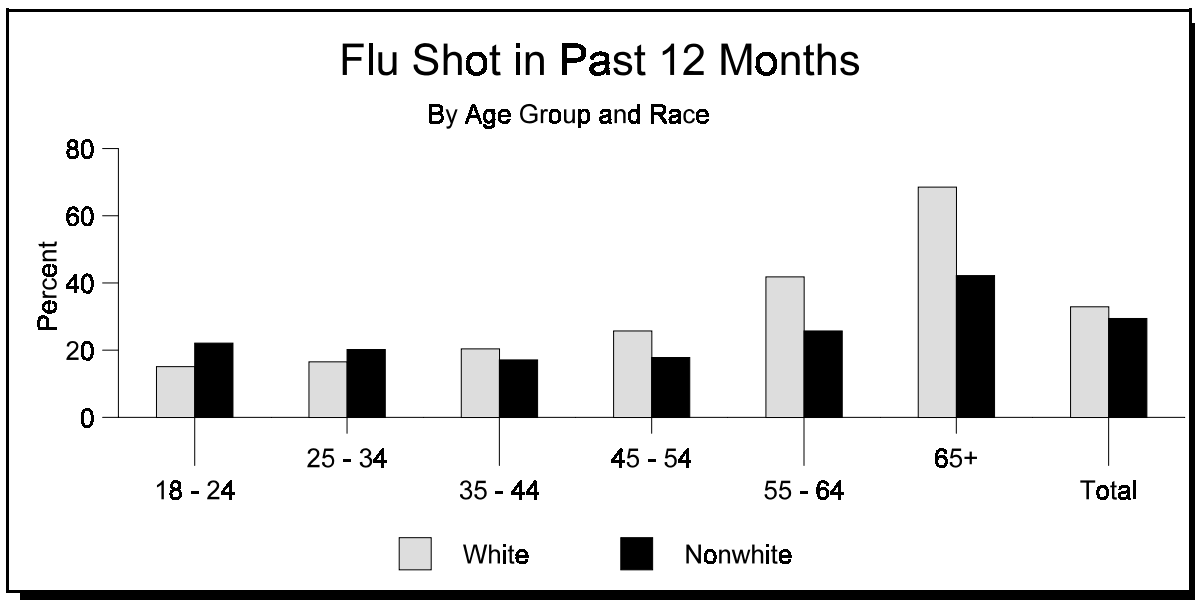


Figure 17

Flu Shot in Past 12 Months

Groups	White		Nonwhite		Total	
	Number	Percent	Number	Percent	Number	Percent
Sex						
Male	265	30.2	79	25.6	345	28.6
Female	446	35.3	138	20.7	587	30.1
Age Group						
18-24	28	15.1	20	22.1	48	18.0
25-34	55	16.5	44	20.2	99	17.9
35-44	81	20.4	33	17.1	116	19.4
45-54	100	25.7	33	17.8	133	23.2
55-64	122	41.8	28	25.7	151	37.4
65+	315	68.5	57	42.2	372	61.8
Education						
< High School	97	29.7	65	24.7	163	27.2
High School Graduate or GED	231	33.4	65	20.5	297	28.5
Some College or Technical School	188	32.6	48	22.6	237	29.4
College Graduate	191	33.8	37	26.4	228	32.1
Income						
< \$15,000	94	37.6	68	25.1	163	30.4
\$15 - \$24,999	136	39.8	54	24.3	190	32.7
\$25 - \$34,999	90	28.9	27	22.2	117	26.6
\$35 - \$49,999	105	29.7	16	21.5	121	27.4
\$50 - \$74,999	71	25.6	12*	27.6	83	25.9
\$75,000+	81	33.3	6*	19.4	88	31.8
Employment Status						
Employed	316	25.7	107	20.5	426	23.8
Not Employed	27	27.2	12	14.7	39	20.5
Student/Homemaker	53	20.5	10	24.6	63	21.4
Retired/Unable to Work	314	58.2	87	33.8	402	50.7
Total	711	32.9	217	22.9	932	29.4

* Sample size less than 50

Overweight and Obesity

The proportion of overweight persons has increased substantially during the past twenty years. Morbidity related to being overweight is the second leading cause of death in the United States and causes approximately 300,000 deaths each year. Overweight persons substantially increase their risk of illness from hypertension, high cholesterol, Type 2 diabetes, heart disease and stroke,

gallbladder disease, endometrial, breast, prostate and colon cancers and arthritis.

Overweight people may also suffer from social stigmatization, discrimination and low self-esteem.

Weight may be controlled by dietary changes such as decreasing caloric intake and by increasing physical activity.

According to the 2001 BRFSS study 60.9 percent of those surveyed in Mississippi

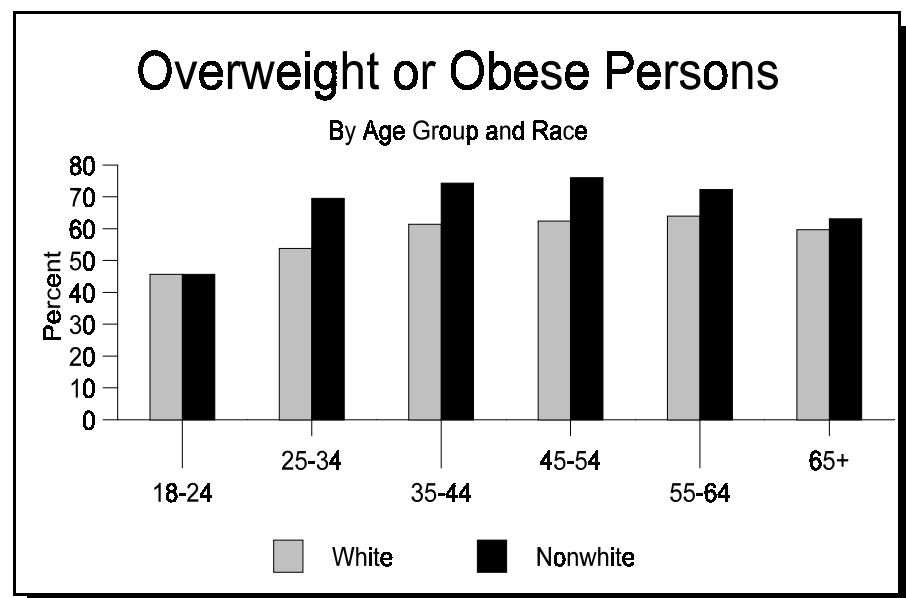


Figure 18

reported themselves as being either overweight (BMI \geq 25) or obese (BMI \geq 30).

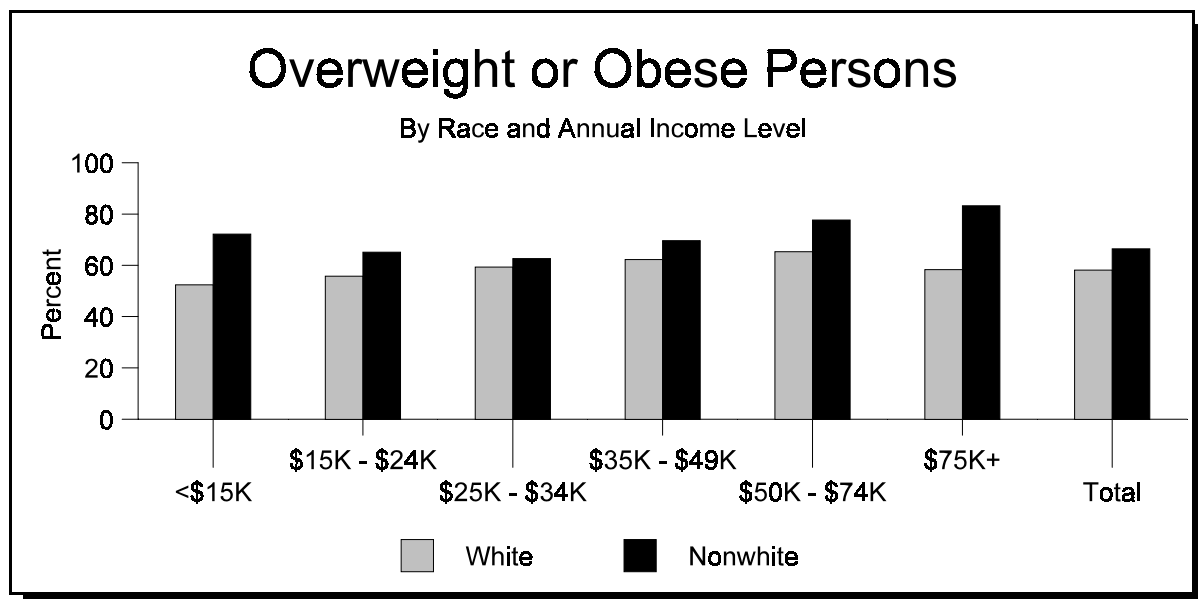


Figure 19

People at Risk From Being Overweight or Obese (Based on BMI)

Groups	White		Nonwhite		Total	
	Number	Percent	Number	Percent	Number	Percent
Sex						
Male	572	70.8	213	65.9	790	69.1
Female	577	46.4	443	66.9	1,026	53.5
Age Group						
18-24	75	45.7	49	45.7	125	45.6
25-34	180	53.8	154	69.5	337	60.2
35-44	233	61.4	139	74.3	375	65.8
45-54	228	62.4	144	76.0	372	66.7
55-64	165	64.0	92	72.3	261	66.5
65+	264	59.7	76	63.1	340	60.4
Education						
< High School	180	61.7	166	68.2	348	64.2
High School Graduate or GED	370	60.6	217	62.9	591	61.5
Some College or Technical School	305	57.5	163	68.6	472	61.1
College Graduate	290	53.9	109	70.3	400	57.4
Income						
< \$15,000	130	52.4	196	72.2	329	63.4
\$15 - \$24,999	177	55.8	161	65.1	340	59.7
\$25 - \$34,999	184	59.3	87	62.6	273	60.5
\$35 - \$49,999	191	62.2	59	69.6	253	64.3
\$50 - \$74,999	160	65.3	37*	77.7	197	67.3
\$75,000+	134	58.3	26*	83.2	161	61.1
Employment Status						
Employed	664	59.5	402	68.5	1,074	62.6
Not Employed	61	66.6	60	63.3	122	64.3
Student/Homemaker	106	42.9	27	45.0	134	43.4
Retired/Unable to Work	318	61.2	164	68.4	483	63.4
Total	1,149	58.1	656	66.4	1,816	60.9

* Sample size less than 50

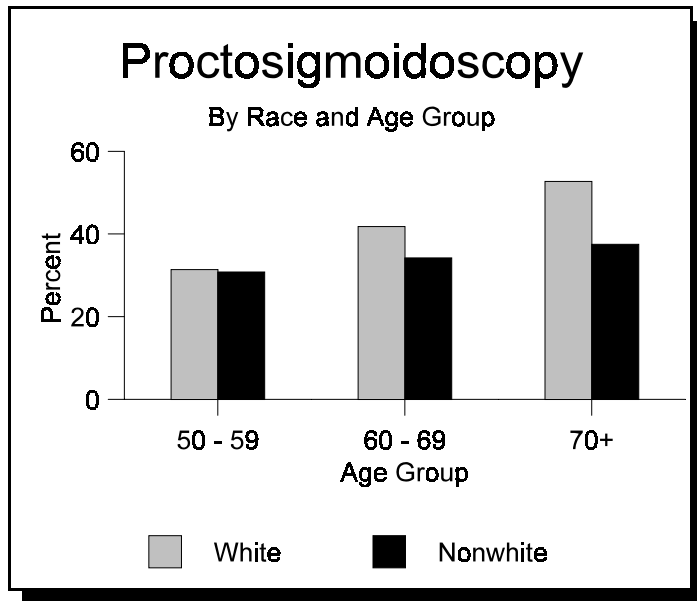
Persons With Healthy Weight

Groups	White		Nonwhite		Total	
	Number	Percent	Number	Percent	Number	Percent
Sex						
Male	233	26.6	90	29.0	326	27.5
Female	534	43.4	146	24.3	686	36.7
Age Group						
18-24	74	44.9	46	43.0	121	44.2
25-34	151	39.8	53	25.3	207	34.0
35-44	139	31.3	44	20.5	186	27.5
45-54	128	31.7	32	18.5	160	27.6
55-64	99	30.7	24	22.8	123	28.4
65+	169	36.0	34	25.2	204	33.3
Education						
< High School	101	33.2	54	22.7	161	28.9
High School Graduate or GED	234	32.8	83	29.6	318	31.6
Some College or Technical School	202	35.7	59	25.5	262	32.5
College Graduate	230	39.4	39	26.5	270	36.7
Income						
< \$15,000	93	38.5	55	23.5	150	30.2
\$15 - \$24,999	134	37.7	58	27.8	194	33.6
\$25 - \$34,999	119	35.6	35	28.2	155	33.1
\$35 - \$49,999	113	32.6	23	27.2	136	31.0
\$50 - \$74,999	77	28.4	10*	20.3	87	27.1
\$75,000+	97	38.4	5*	16.8	103	36.0
Employment Status						
Employed	439	35.1	132	24.1	577	31.3
Not Employed	27	24.0	30	32.9	59	29.2
Student/Homemaker	114	45.3	20	46.6	134	45.5
Retired/Unable to Work	185	33.1	53	23.7	239	30.3
Total	767	35.3	236	26.4	1,012	32.4

* Sample size less than 50

Colorectal Cancer Screening

Colorectal cancer (CRC) is the second leading cause of cancer-related deaths in the United States. An estimated 130,200 cases (66,600 females and 63,600 males) of CRC and 56,300 deaths (28,500 females and 27,800 males) from CRC were expected to occur in 2000. When cancer-related deaths are estimated separately for males and females, however, CRC becomes the third leading cause of cancer death behind lung and breast cancers for females and behind lung and prostate cancers for males.



Risk factors for CRC may include age, personal and family history of polyps or colorectal cancer, inflammatory bowel disease, inherited syndromes, physical inactivity (colon only), obesity, alcohol use and a diet high in fat and low in fruits and vegetables. Detecting and removing precancerous colorectal polyps and detecting and treating the disease in its earliest stages will reduce deaths from CRC. Fecal Occult Blood Testing and sigmoidoscopy are widely used to screen for CRC and barium enema and colonoscopy are used as diagnostic tests.

Figure 20

In 2001, the death rate for colorectal cancer in Mississippi was 54.6 per 100,000 among people age fifty-five and older. Digital rectal examinations (DRE) and proctosigmoidoscopic examinations are designed to detect colorectal

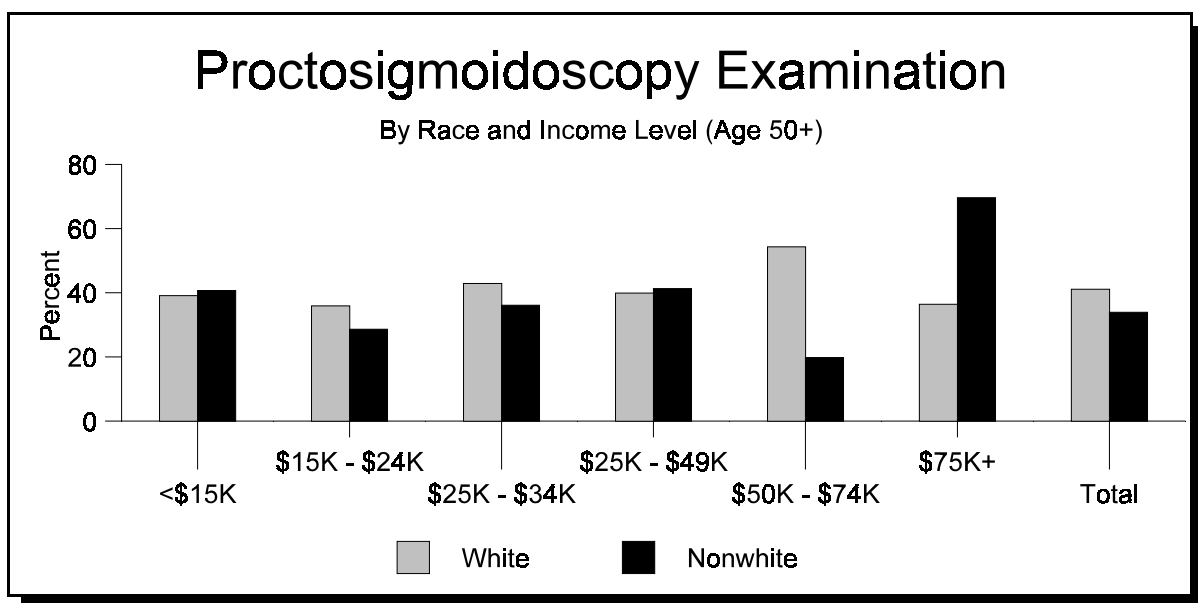


Figure 21

cancer and other problems at an early stage to enhance the success of medical intervention. The American Cancer Society recommends a DRE annually after age forty and a proctoscopy every three to five years after age fifty.

The 2001 BRFSS data for Mississippi indicates that 39.0 percent of those surveyed who were age 50 or older had ever had a protosigmoidoscopy examination. For persons aged 50-59 the rate was 31.2 percent compared to 27.5 percent in 1999; for those 60-69 it was 39.7 percent and increase from 38.5 percent in 1999. For those were age 70 and older the rate was 48.4 percent compared to 44.0 percent in 1999 (Figure 20).

Ever Had Proctosigmoidoscopy (Persons 50+)

Groups	White		Nonwhite		Total	
	Number	Percent	Number	Percent	Number	Percent
Sex						
Male	125	36.7	25	21.4	150	32.6
Female	260	44.6	91	42.6	351	43.9
Age Group						
50-59	112	31.4	48	30.8	160	31.2
60-69	111	41.8	31	34.2	142	39.7
70+	162	52.7	37	37.5	199	48.4
Education						
< High School	56	32.5	50	34.0	106	33.0
High School Graduate or GED	137	41.2	25	26.9	162	38.2
Some College or Technical School	96	43.8	24	41.6	120	42.9
College Graduate	95	44.9	15	40.1	110	44.3
Income						
< \$15,000	61	39.1	46	40.7	107	39.7
\$15 - \$24,999	65	35.9	22	28.6	87	33.5
\$25 - \$34,999	58	42.9	11*	36.1	69	41.2
\$35 - \$49,999	48	39.9	5*	41.3	53	39.7
\$50 - \$74,999	32	54.3	3*	19.8	35	49.5
\$75,000+	38	36.4	7*	69.6	45	38.6
Employment Status						
Employed	114	32.4	34	29.1	148	31.3
Not Employed	7*	25.9	2*	9.0	9*	20.7
Student/Homemaker	36	44.5	2*	17.3	38	40.8
Retired/Unable to Work	227	48.1	77	39.1	304	45.5
Total	385	41.1	116	33.9	501	39.0

* Sample size less than 50

Ever Had Home Blood Stool Test (Persons 50+)

Groups	White		Nonwhite		Total	
	Number	Percent	Number	Percent	Number	Percent
Sex						
Male	120	35.3	24	22.7	145	32.2
Female	203	34.8	49	18.8	252	30.3
Age Group						
50-59	96	28.5	35	20.6	132	26.5
60-69	108	40.1	11	9.3	119	32.4
70+	119	38.3	27	29.6	146	35.8
Education						
< High School	46	27.5	29	19.4	75	23.4
High School Graduate or GED	102	30.2	22	25.6	124	29.2
Some College or Technical School	83	41.0	15	20.1	99	36.7
College Graduate	91	42.4	6*	12.2	97	38.6
Income						
< \$15,000	38	22.0	22	15.7	60	18.9
\$15 - \$24,999	61	33.7	15	18.9	76	28.8
\$25 - \$34,999	58	42.7	8*	22.9	66	38.6
\$35 - \$49,999	33	28.6	4*	28.1	38	29.2
\$50 - \$74,999	26	40.8	5*	31.7	31	39.5
\$75,000+	43	42.9	3*	22.0	46	41.5
Employment Status						
Employed	105	30.6	18	12.9	124	26.1
Not Employed	9*	32.7	5*	25.6	14*	30.5
Student/Homemaker	30	38.1	2*	33.2	32	37.3
Retired/Unable to Work	178	37.8	48	24.6	226	34.0
Total	323	35.0	73	20.4	397	31.1

* Sample size less than 50

Arthritis

The various forms of arthritis affect more than 15 percent of the U.S. population—over 43 million persons—and more than 20 percent of the adult population, making arthritis one of the most common conditions in the United States according to the Healthy People 2010 publication.

The significant public health impact of arthritis is reflected in a variety of measures. First, arthritis is the leading cause of disability. Arthritis limits the major activities (for example, working, housekeeping, school) of nearly 3 percent of the entire U.S. population (seven million persons), including nearly one out of every five persons with arthritis. Arthritis trails only heart disease as a cause of work disability. As a consequence, arthritis limits the independence of affected persons and disrupts the lives of family members and other care givers.

Health-related quality-of-life measures are consistently worse for persons with arthritis, whether the measure is healthy days in the past 30 days, days without severe pain, “ability days” (that is, days without activity limitations), or difficulty in performing personal care activities. One of the national goals for Healthy People 2010 is to reduce the rate of adults with chronic joint symptoms that limit the activity of a person to 21 percent. In Mississippi, the 2001 BRFSS survey showed that 36.3 percent of the population either reported chronic joint symptoms or had been diagnosed with arthritis by a health care professional.

As seen in Figure 22, the proportion increases with age. Sixty-two percent of respondents over the age of 65 either reported chronic joint symptoms or being diagnosed with arthritis. There was a noticeable difference by race with this age group. The rate for whites was 58.1 percent while non whites reported a rate of 73.3 percent. Only 10.4 percent of those 18-24 years old reported these conditions.

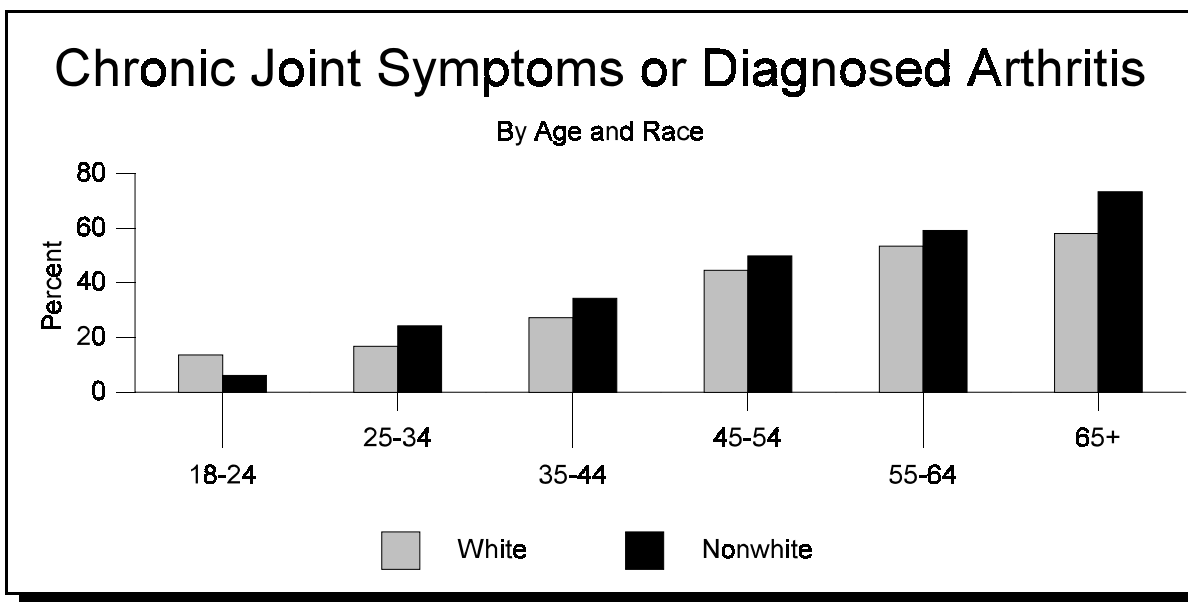


Figure 22

Chronic Joint Symptoms or Diagnosed with Arthritis

Groups	White		Nonwhite		Total	
	Number	Percent	Number	Percent	Number	Percent
Sex						
Male	281	32.6	112	31.0	396	32.1
Female	517	39.7	285	40.9	807	40.1
Age Group						
18-24	21	13.6	10	6.1	31	10.4
25-34	64	16.8	55	24.2	120	19.9
35-44	117	27.3	68	34.3	187	29.9
45-54	170	44.5	98	49.9	268	46.2
55-64	151	53.4	70	59.2	224	55.0
65+	273	58.1	96	73.3	371	62.0
Education						
< High School	159	50.4	143	52.1	307	51.2
High School Graduate or GED	281	41.6	122	32.8	405	38.2
Some College or Technical School	198	32.4	81	31.2	280	32.0
College Graduate	156	26.0	46	26.4	202	26.0
Income						
< \$15,000	147	56.6	149	52.4	298	54.0
\$15 - \$24,999	149	42.5	81	31.7	231	37.6
\$25 - \$34,999	123	38.3	50	37.7	173	37.9
\$35 - \$49,999	105	31.2	22	19.6	128	28.3
\$50 - \$74,999	61	23.2	11*	20.6	72	22.7
\$75,000+	65	26.6	11*	35.6	77	27.9
Employment Status						
Employed	338	27.8	172	28.0	514	27.8
Not Employed	37	31.7	32	23.9	70	27.9
Student/Homemaker	75	26.1	13	17.6	89	24.3
Retired/Unable to Work	346	63.6	177	74.1	525	66.9
Total	798	36.3	397	36.4	1,203	36.3

* Sample size less than 50

Asthma

According to the U. S. Department of Health and Human Services, Healthy People 2010 publication, asthma is a serious and growing health problem. An estimated 14.9 million persons in the United States have asthma. The number of people with asthma increased by 102 percent between 1979–80 and 1993–94.

Most of the problems caused by asthma could be averted if persons with asthma and their health care providers managed the disease according to established guidelines. Effective management of asthma comprises four major components: controlling exposure to factors that trigger asthma episodes, adequately managing asthma with medicine, monitoring the disease by using objective measures of lung function and educating asthma patients to become partners in their own care. Such prevention efforts are

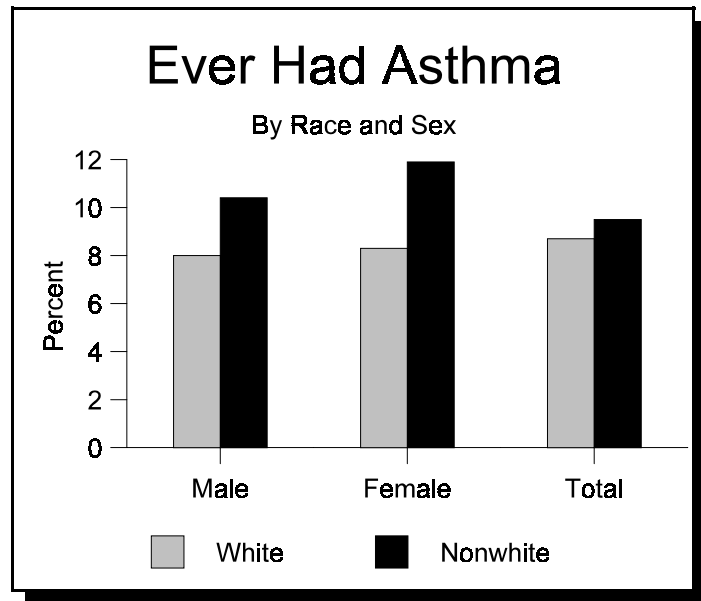


Figure 23

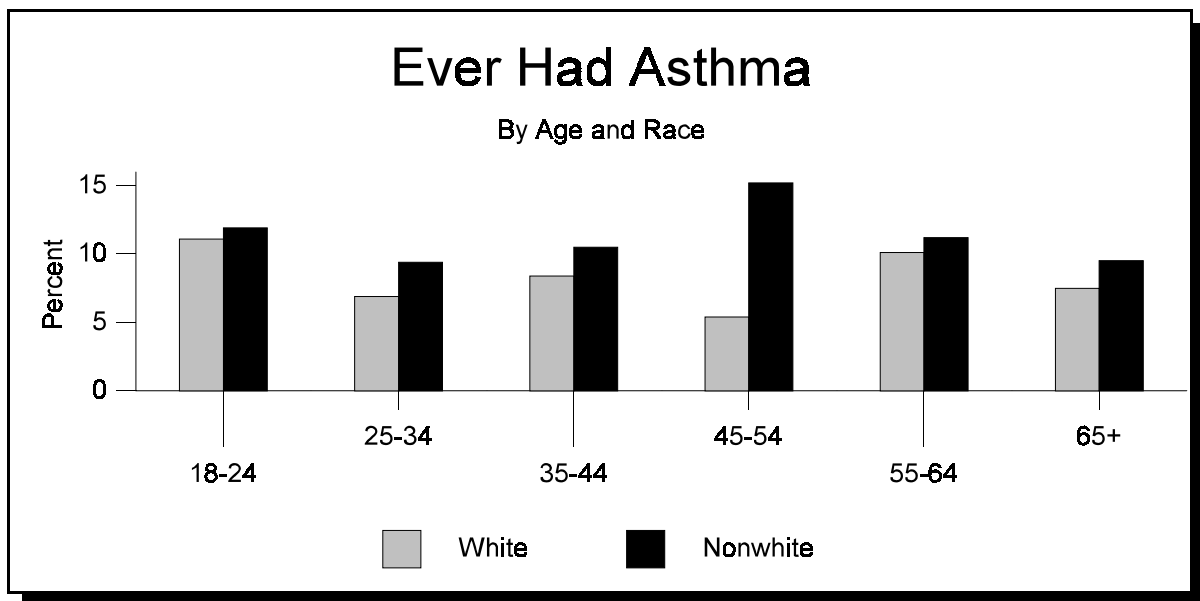


Figure 24

essential to interrupt the progression from disease to functional limitation and disability and to improve the quality of life for persons with asthma.

In Mississippi, the 2001 BRFSS survey revealed that 9.2 percent of the respondents said that they had ever had asthma. The nonwhite rate was 11.2 percent compared to 8.1 percent for white

respondents. Figure 24 shows that the nonwhite rate exceeded the white rate in all age groups. It is noteworthy that in the 45-54 year old group the nonwhite rate almost tripled the white rate: 15.2 percent to 5.4 percent. Women of both races reported a higher rate than men.

Ever Had Asthma

Groups	White		Nonwhite		Total	
	Number	Percent	Number	Percent	Number	Percent
Sex						
Male	64	8.0	30	10.4	94	8.7
Female	101	8.3	77	11.9	179	9.5
Age Group						
18-24	19	11.1	11	11.9	30	11.4
25-34	26	6.9	17	9.4	44	8.1
35-44	33	8.4	21	10.5	54	9.1
45-54	19	5.4	28	15.2	47	8.5
55-64	27	10.1	15	11.2	42	10.3
65+	37	7.5	14	9.5	51	7.9
Education						
< High School	39	10.7	35	14.5	75	12.5
High School Graduate or GED	42	6.6	33	9.7	75	7.8
Some College or Technical School	43	8.3	21	8.0	64	8.2
College Graduate	41	8.4	16	14.2	57	9.6
Income						
< \$15,000	27	8.5	39	14.7	67	12.1
\$15 - \$24,999	32	10.1	29	12.6	61	11.1
\$25 - \$34,999	20	6.0	9	7.4	29	6.4
\$35 - \$49,999	19	6.9	6	7.0	25	6.9
\$50 - \$74,999	21	9.0	4*	11.4	25	9.4
\$75,000+	13	5.5	5*	13.1	18	6.4
Employment Status						
Employed	72	6.4	52	9.5	125	7.5
Not Employed	11	12.0	9	7.6	20	9.6
Student/Homemaker	24	9.3	7	17.7	31	11.1
Retired/Unable to Work	57	10.5	38	16.0	95	12.2
Total	165	8.1	107	11.2	273	9.2

* Sample size less than 50

Exercise and Physical Activity

On average, physically active people outlive those who are inactive. Regular physical activity helps to maintain the functional independence of older adults and enhances the quality of life for people of all ages. The role of physical activity in preventing coronary heart disease (CHD) is of particular importance, given that CHD is the leading cause of death and disability in the United States and in Mississippi. Physically inactive people are almost twice as likely to develop CHD as persons who engage in regular physical activity. The risk posed by physical inactivity is almost as high as several well-known CHD risk factors such as cigarette smoking, high blood pressure and high blood cholesterol. Physical inactivity is more prevalent than any of these other risk factors.

Regular physical activity is important for people who have joint or bone problems and has been shown to improve muscle function, cardiovascular function, and physical performance. People with osteoporosis may respond positively to regular physical activity particularly weight bearing activities such as walking and especially when combined with appropriate drug therapy and calcium intake.

In Mississippi, 33.4 percent of the population is at risk for not participating in any physical activity outside of work in the past 30 days.

People with less education (Figure 25)

and in lower income levels (Figure 26) and reported the highest percentage of physical inactivity.

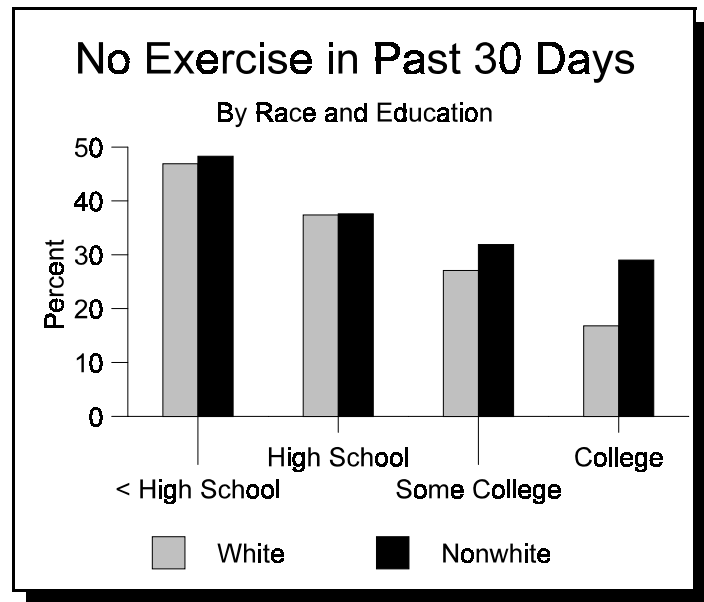


Figure 25

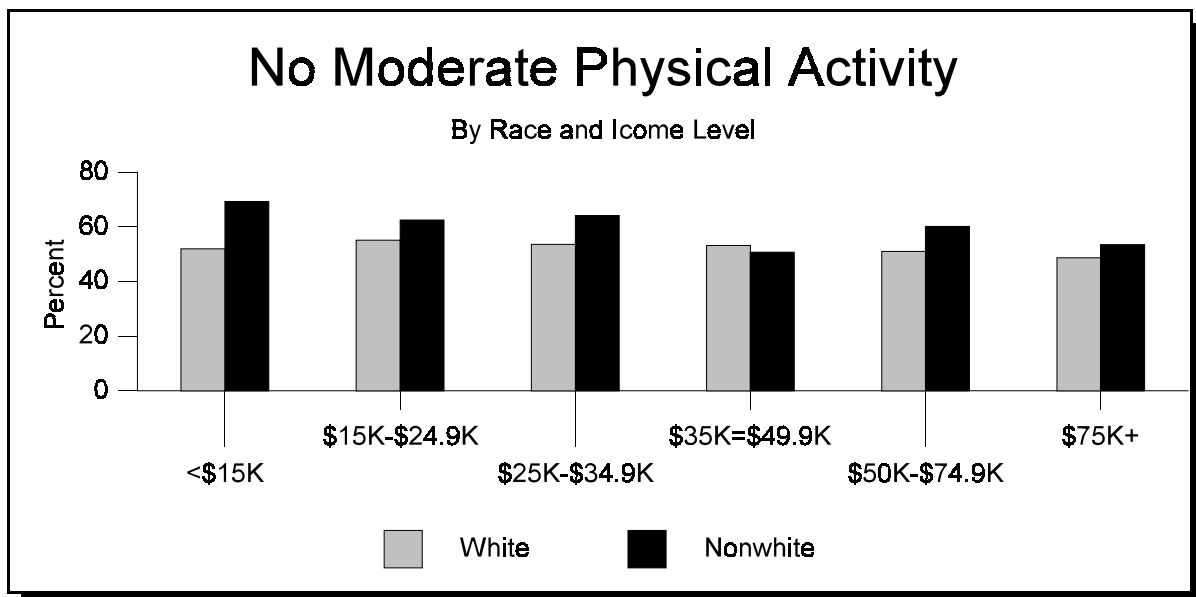


Figure 26

Do Not Meet Moderate Physical Activity Recommendations

Groups	White		Nonwhite		Total	
	Number	Percent	Number	Percent	Number	Percent
Sex						
Male	407	48.6	193	55.9	604	51.0
Female	701	54.9	442	66.3	1,152	59.0
Age Group						
18-24	67	38.7	62	51.3	131	44.3
25-34	187	50.8	126	52.4	316	51.6
35-44	222	55.5	145	71.6	371	61.2
45-54	216	55.6	123	63.8	339	58.2
55-64	153	53.0	84	68.9	238	57.0
65+	257	54.2	92	69.0	351	58.0
Education						
< High School	168	53.5	173	66.1	347	59.4
High School Graduate or GED	346	51.0	210	60.8	558	54.8
Some College or Technical School	292	51.5	148	58.8	442	53.7
College Graduate	299	52.6	100	60.4	401	54.5
Income						
< \$15,000	140	51.9	194	69.3	336	61.6
\$15 - \$24,999	189	55.1	159	62.4	352	58.6
\$25 - \$34,999	177	53.5	87	64.0	265	56.9
\$35 - \$49,999	172	53.2	44	50.7	217	52.5
\$50 - \$74,999	131	51.0	31*	60.1	162	52.5
\$75,000+	122	48.6	18*	53.4	141	49.2
Employment Status						
Employed	626	51.9	369	59.7	1,005	54.8
Not Employed	48	42.7	62	57.8	112	50.6
Student/Homemaker	110	43.2	30	58.2	140	46.4
Retired/Unable to Work	324	58.8	171	70.4	496	62.4
Total	1,108	51.9	635	61.6	1,756	55.2

* Sample size less than 50

No Exercise During Past 30 Days

Groups	White		Nonwhite		Total	
	Number	Percent	Number	Percent	Number	Percent
Sex						
Male	203	24.6	120	32.8	330	27.6
Female	456	36.1	284	42.4	749	38.5
Age Group						
18-24	34	21.2	32	24.1	67	22.4
25-34	104	28.0	89	37.7	196	32.4
35-44	112	27.0	78	40.0	196	32.3
45-54	125	32.5	78	40.0	203	34.8
55-64	87	31.6	61	46.9	151	35.9
65+	190	39.9	66	47.6	258	42.0
Education						
< High School	145	46.9	131	48.7	285	48.3
High School Graduate or GED	251	37.4	139	37.6	395	37.8
Some College or Technical School	159	27.1	81	31.9	242	28.7
College Graduate	100	16.8	47	29.0	147	19.4
Income						
< \$15,000	120	47.7	127	45.9	251	46.9
\$15 - \$24,999	125	36.8	101	39.6	230	38.4
\$25 - \$34,999	106	32.8	51	37.5	159	34.6
\$35 - \$49,999	82	25.3	23	23.5	106	24.8
\$50 - \$74,999	50	19.6	15*	29.6	65	21.2
\$75,000+	40	15.3	7*	20.8	48	16.2
Employment Status						
Employed	315	26.0	232	37.7	557	30.4
Not Employed	33	36.4	39	34.3	75	36.0
Student/Homemaker	80	29.9	14	24.1	95	28.8
Retired/Unable to Work	228	40.5	119	46.5	349	42.5
Total	659	30.6	404	38.0	1,079	33.4

* Sample size less than 50

Prostate Cancer Screening

According to the U. S. Department of Health and Human Services prostate cancer is the most commonly diagnosed form of cancer (other than skin cancer) in males and the second leading cause of cancer death among males in the United States. Prostate cancer was expected to account for an estimated 180,400 cases and 31,900 deaths in 2000, or about 29 percent and 11 percent of the cases and deaths due to all cancers, respectively. In Mississippi the death rate among males for prostate cancer was 29.9 per 100,000 (25.4 for whites and 37.5 for nonwhites). Prostate cancer is most common in men aged 65 years and older, who account for approximately 80 percent of all cases of prostate cancer. Digital rectal examination (DRE) and the prostate-specific antigen (PSA) test are two commonly used methods for detecting prostate cancer.

Although several treatment alternatives are available for prostate cancer, their impact on reducing death from prostate cancer when compared with no treatment in patients with operable cancer is uncertain. Efforts aimed at reducing deaths through screening and early detection remain controversial because of the uncertain benefits and potential risks of screening, diagnosis, and treatment.

The 2001 BRFSS survey for Mississippi indicated that 56.6 percent of males 40 years of age and older reported ever having had a PSA test. The overall rate for white respondents was 58.6 percent while nonwhites reported a rate of 51.5 percent. There was a notable difference in rates for men age 60 and older. In the 60-69 age category, the screening rate for whites was 77.5 percent compared to 55.3 percent for nonwhites and for men 70 and older, whites had a rate of 70.9 percent while nonwhites had a rate of only 56.3 percent.

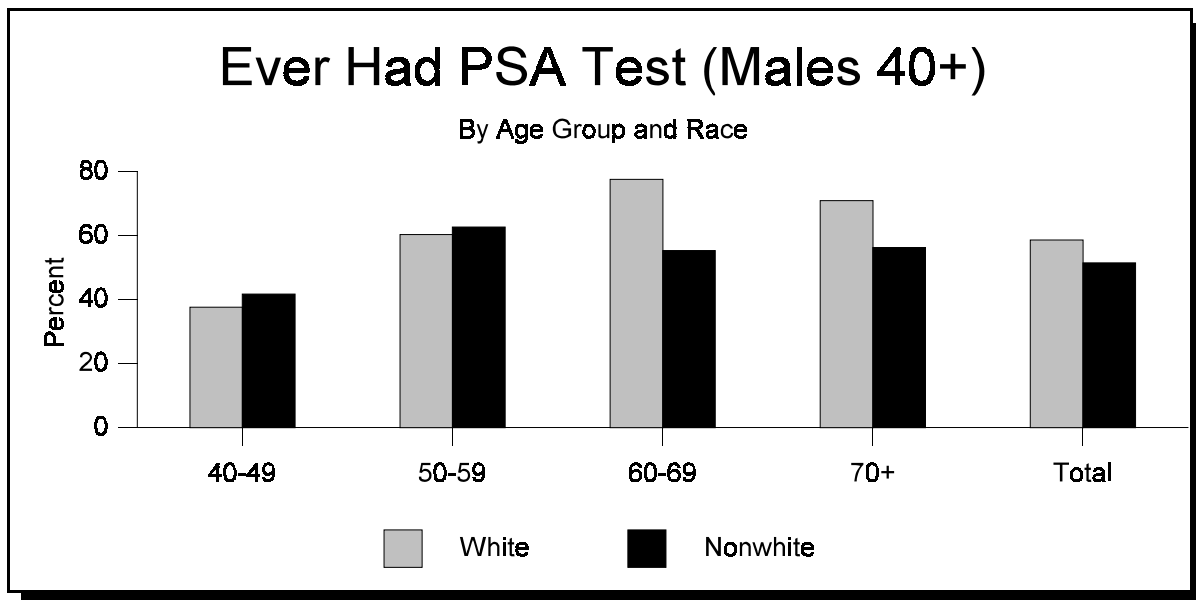


Figure 27

Ever Had a PSA Test (Males 40+)

Groups	White		Nonwhite		Total	
	Number	Percent	Number	Percent	Number	Percent
Age Group						
40-49	62	37.6	37	41.7	99	38.7
50-59	76	60.3	37	62.6	114	61.2
60-69	96	77.5	18*	55.3	115	73.3
70+	60	70.9	12*	56.3	72	66.7
Education						
< High School	37	53.2	27	38.9	64	46.1
High School Graduate or GED	95	59.5	28	50.0	123	56.3
Some College or Technical School	63	56.1	36*	72.0	101	61.1
College Graduate	98	61.7	12*	57.5	110	61.3
Income						
< \$15,000	26	52.6	20*	52.7	46	52.6
\$15 - \$24,999	38	50.5	22*	48.8	60	49.8
\$25 - \$34,999	48	66.8	13*	46.6	62	60.9
\$35 - \$49,999	57	58.1	11*	67.3	69	59.4
\$50 - \$74,999	36	55.0	12*	90.5	48	59.6
\$75,000+	55	68.0	7*	33.5	62	62.9
Employment Status						
Employed	151	52.0	53	48.3	206	51.1
Not Employed	4*	25.9	5*	29.1	9*	27.3
Student/Homemaker	0*	0.0	2*	74.6	2*	65.1
Retired/Unable to Work	139	72.0	43	58.4	182	68.3
Total	294	58.6	104	51.5	400	56.6

* Sample size less than 50

Disability

Traditionally, the health status of persons with disabilities has been associated with medical care, rehabilitation services and long-term care financing according to *Healthy People 2010*. A number of health care professionals believe that these are misconceptions and have resulted in a lack of emphasis on health promotion that target people with disabilities and has led to an

increase in secondary conditions such as social, emotional, family and community problems.

According to the Centers for Disease control and Prevention (CDC), people who have activity limitations report having had more days of pain, depression, anxiety, and sleeplessness and fewer days of vitality during the previous month than people not reporting activity limitations. In view of the increased

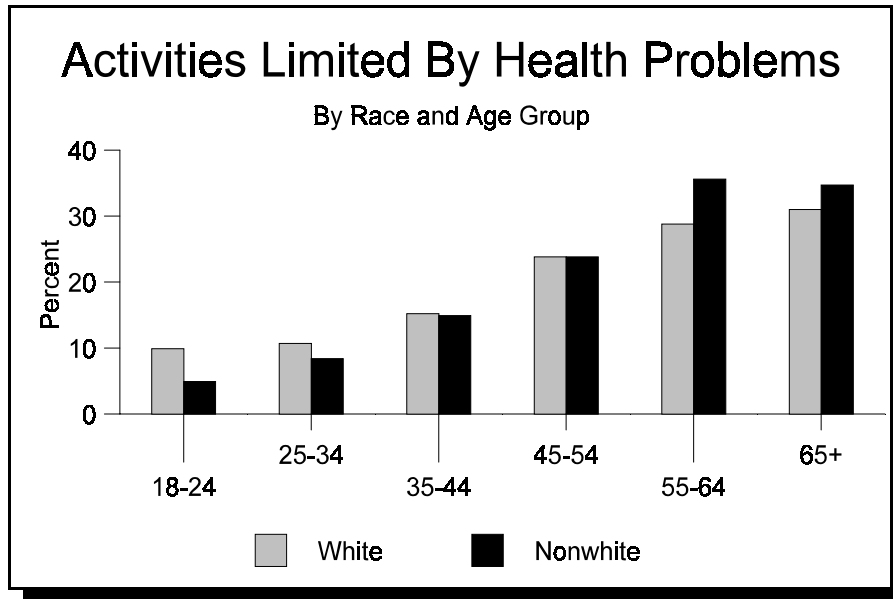


Figure 28

rates of disability, it is important to target activities and services that address all aspects of health and well-being, as well as providing access to medical care. For an older person with a disability, it is important to target conditions that may threaten their well-being.

There are few data systems that identify those with disabilities as a sub-population.

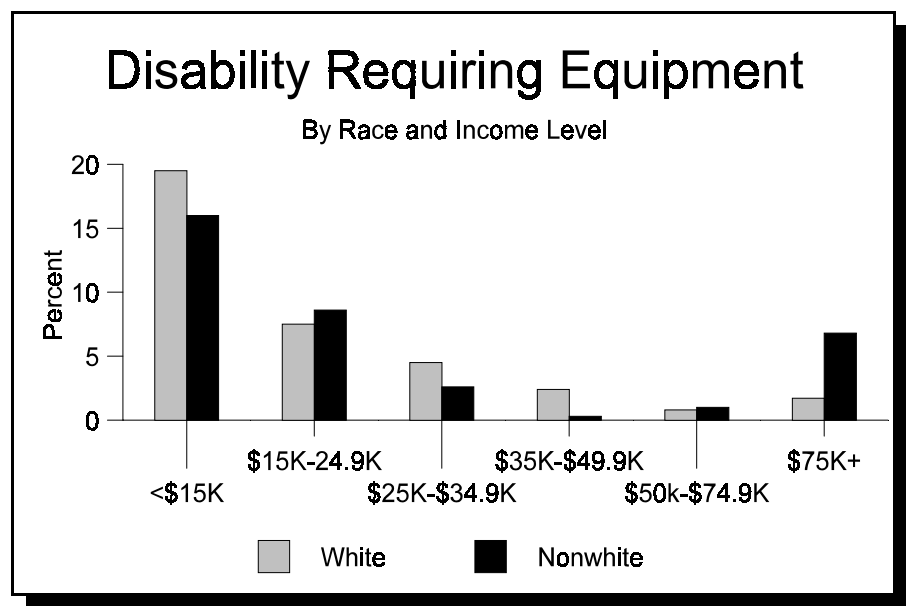


Figure 29

Despite the paucity of data, some disparities between people with and without disabilities have been noted. These disparities include excess weight, reduced physical activity, increased stress, and less frequent mammograms for women over age 55 years with disabilities.

It was noted in *Healthy People 2000* that persons with disabilities have increased health concerns and susceptibility to secondary conditions. People who have activity limitations report having had more days of pain, depression, anxiety, and sleeplessness and fewer days of vitality during the previous month than people not reporting activity limitations.

Slightly more than 19 percent of Mississippians reported that their activities were limited because of health problems in the 2001 BRFSS survey. White respondents reported a rate of 20.1 percent while nonwhites reported a rate of 17.3 percent. Figure 28 reflects the fact that these limitations increase with age for both races. People over the age of 65 report a rate of 31.9 percent (31.0 for whites and 34.7 for nonwhites) but the 18-24 age group had a rate of only 7.7 percent (9.9 for white and 4.9 for nonwhites).

Only 6.9 percent of the population have health problems that require special equipment such as a wheelchair, special bed, cane or special telephone. Figure 29 shows that those with lower incomes tend to require special equipment for health problems.

Activities Limited Because of Health Problems

Groups	White		Nonwhite		Total	
	Number	Percent	Number	Percent	Number	Percent
Sex						
Male	162	19.4	62	16.0	225	18.2
Female	283	20.8	129	18.4	413	19.9
Age Group						
18-24	17	9.9	6	4.9	23	7.7
25-34	39	10.7	20	8.4	60	9.8
35-44	66	15.2	27	14.9	94	15.0
45-54	90	23.8	50	23.8	140	23.8
55-64	81	28.8	45	35.6	126	30.3
65+	152	31.0	43	34.7	195	31.9
Education						
< High School	102	33.0	75	26.8	178	29.9
High School Graduate or GED	135	19.2	49	13.5	185	17.0
Some College or Technical School	109	17.5	44	17.0	153	17.3
College Graduate	98	16.8	21	11.0	119	15.5
Income						
< \$15,000	120	45.4	83	27.3	203	34.9
\$15 - \$24,999	78	23.5	31	13.4	110	19.0
\$25 - \$34,999	54	16.1	19	14.0	73	15.3
\$35 - \$49,999	53	15.3	4	2.4	58	12.1
\$50 - \$74,999	29	12.6	5*	8.7	34	11.9
\$75,000+	30	11.9	5*	16.8	35	12.4
Employment Status						
Employed	138	11.8	41	6.8	181	10.0
Not Employed	24	22.1	23	20.9	47	21.2
Student/Homemaker	46	15.6	8	14.0	54	15.2
Retired/Unable to Work	235	42.3	118	48.3	353	44.1
Total	445	20.1	191	17.3	638	19.1

* Sample size less than 50

Health Problems Requiring Special Equipment

Groups	White		Nonwhite		Total	
	Number	Percent	Number	Percent	Number	Percent
Sex						
Male	42	4.4	34	8.8	76	5.8
Female	95	7.1	68	9.3	163	7.8
Age Group						
18-24	2	1.1	0	0.0	2	0.6
25-34	7	1.7	4	1.1	11	1.4
35-44	11	2.5	7	3.9	18	3.0
45-54	21	5.5	25	11.6	46	7.4
55-64	17	5.4	21	17.0	38	8.4
65+	79	16.1	45	35.9	124	21.1
Education						
< High School	42	11.9	55	20.0	97	15.5
High School Graduate or GED	37	5.6	25	6.7	62	6.0
Some College or Technical School	29	4.2	15	4.7	44	4.3
College Graduate	27	4.1	6	3.0	33	3.8
Income						
< \$15,000	49	19.5	46	16.0	95	17.4
\$15 - \$24,999	26	7.5	21	8.6	47	7.9
\$25 - \$34,999	15	4.5	5	2.6	20	3.9
\$35 - \$49,999	8	2.4	1	0.3	9	1.9
\$50 - \$74,999	4	0.8	1*	1.0	5	0.8
\$75,000+	4	1.7	2*	6.8	6	2.3
Employment Status						
Employed	16	1.3	7	0.9	23	1.1
Not Employed	4	3.7	8	7.0	12	5.4
Student/Homemaker	9	2.9	2	4.7	11	3.3
Retired/Unable to Work	107	18.8	84	36.4	191	24.2
Total	137	5.8	102	9.0	239	6.9

* Sample size less than 50



MISSISSIPPI STATE DEPARTMENT OF HEALTH

January 2004

Equal Opportunity In Employment/Services